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ABSTRACT

Empire State's 1976 Master Plan called for focus on providing educational alternatives for the increasingly diverse students at the college. It was decided to design programs to fit the students, which raised two problems concerning educational standards: criteria for performance and degree definitions. This report discusses the coordination of adult development and college development. Major dimensions of adult development are identified: ego development; intellectual development; interpersonal style; moral and ethical development; and development of social interest and of purpose. Potential contributions from academic disciplines are described in the fields of philosophy, literature, drama, history, and science. A 43-item bibliography is included. (LBH)

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A CONCEPTUAL FRAMEWORK for EDUCATIONAL ALTERNATIVES at EMPIRE STATE COLLEGE

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A CONCEPTUAL FRAMEWORK FOR EDUCATIONAL ALTERNATIVES AT EMPIRE STATE COLLEGE

A. W. Chickering, Vice-President
for Policy Analysis and Evaluation

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PREFACE

Empire State College began in 1971 with a few clear educational principles and some rough ideas about how they might be realized. Since then those ideas have taken shape and substance. Staff have been employed, resources have been assembled, concrete policies and practices have been developed. Several thousand students have been served, and apparently served well. The College has become fully accredited and has received national recognition. It is now a firmly established unit of the State University of New York.

Those achievements in four short years resulted from the commitment, creativity, hard work, and long hours of a remarkable collection of administrators and faculty members. Now the College faces the more difficult challenge of self-renewal and continued development. That challenge must be successfully met if the creative and energetic faculty members and administrators attracted by the initial challenges are to find continued satisfaction, professional development, and personal growth.

The problem was anticipated a year ago when the President appointed a President's Committee on College Development. At the first meeting of that Committee two major gaps were recognized: (1) there was no clear conception of the College mission to provide a general direction for development; and (2) there was no conceptual framework concerning student characteristics and learning to suggest what additional alternatives might usefully be pursued and how they might relate to one another. A mission statement was formulated and summed up in the 1976 Master Plan:

> Empire State's basic mission is to create new forms and shapes, new structures and substance, in order to provide and test more effective educational alternatives for individuals of all ages, throughout society. This task requires attention to student access to higher education; to content responsive to emerging social needs and individual purposes; to methods that serve diverse students with varied needs; and to program effectiveness and related costs, which define a basic institutional accountability.

The Master Plan also cites as its first focus for the next four years "providing educational alternatives responsive to the needs of increasingly diverse students."

But the second gap identified by the President's Committee on College Development still remains. What conceptual framework concerning students and learning suggest the need for a particular alternative? By what logic is one alternative developed instead of another?

This draft makes a first stab at filling that gap. It aims to complement the Master Plan by providing a framework within which the various alternatives proposed can be developed so as to multiply the range of students served and maximize the quality of the education they obtain. There is no expectation that this is more than a starting point for further discussion, revision, elaboration. As the College develops, our ability to understand what we are doing and why we are doing it ought to grow similarly. So far, we have been able to keep our logic ahead of our actions, although sometimes it has been a close race. Maybe we can still keep ahead.

The ideas presented here have been taking shape in various contexts during the past year. They have been enhanced in major ways by critical reactions to earlier materials by several persons: Paul Bradley, Tom Clark, James W. Hall, Bill Laidlaw, Lois Lamdin, Tim Lehmann, Jack Lindquist, Sig Synnestvedt, Miriam Tatzel, and Rhoada Wald here at ESC; Harold Lasker, William Perry, and George and Rita Weathersby at Harvard; Harold Hodgkinson at National Institute for Education; and Jack Noonan at Virginia Commonwealth University.

Arthur W. Chickering

Empire State College
Saratoga Springs, New York
January 1976

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INTRODUCTION*

Educational Quality and Standards

Until the late 1960s each college and university aimed to serve as carefully selected a group of students as its image and its enrollment pressure would allow. But now commitment to equal educational opportunity is gaining increasing momentum, and the rhetoric of equal opportunity applies not only to the typical college-age student of the past but also to adults of all ages and backgrounds.

The 1950s and early to mid-60s probably represented the height of academic meritocracy. The post-World-War-II baby boom, the GI Bill, and the postwar explosion of interest in higher education created many more applicants than spaces. Some basis for selection was required. What made more sense than admitting those with the best chance of succeeding? Enter admissions testing and prediction equations. The more admissions tests evaluated the verbal and academic skills called for by the classroom, lecture, and written examination, the more accurate the predictions. High-scoring freshmen looked very much like successful graduates, and within most institutions the performance of some freshmen exceeded the performance of some of the graduates. Especially successful graduates went on to obtain Ph.D.'s and are becoming the faculty and administrators of today's institutions. Given these historical dynamics it is easy to see how higher education during the 50s and early to mid-60s became focused on a relatively narrow array of abilities, and it is easy to see why those who came through that system find it difficult to think about higher education in terms of different abilities.

But higher education is now trying to move in a different direction. Its function is no longer limited to socializing "the elite," but to training and educating "the masses." In addition, increasing numbers of adults, together with increased emphasis on life-long learning and the drop in traditional college-age enrollments forecast for the 1980s, create greater student diversity and competitive pressures to respond. These basic changes

* Many of the views presented in this paper should be preceded by "I think," "It is my view that," "In my judgment," and other words recognizing the influence of the author's own perceptions and prejudices. For clarity and succinctness those terms and other qualifiers are omitted. An unwarranted appearance of dogmatism or fact may result. Insert qualifiers as seems appropriate.

from careful selectivity to equal opportunity, from relative homogeneity to increasing student diversity, operate powerfully for publicly supported institutions and have special significance for Empire State.

We must forego the luxury of choosing students to fit college programs, and must instead design programs to fit the students. This complex task raises two problems concerning educational standards: one concerns criteria for performance, the other concerns degree definitions and acceptable areas of performance.

Criteria for Performance

Figure 1 schematically illustrates one aspect of the criteria problem. Take the horizontal dimension as a measure of academic ability or achievement. Those who have done any work in the sciences will recognize the normal curves. Assume that each of the small curves represents 100 students and that the large ESC curve represents 300 students. The figure shows how students tend to be sorted among institutional types in terms of academic ability or achievement. Each institution establishes its own normative framework for evaluation and within each institution and institutional type students are graded from A to F. The result is that students receive C's and D's in some institutions when their abilities and performances are superior to students receiving A's in other institutions.

The normative framework used for grading has little relationship to any clear performance indices. During the late 50s and early 60s grading curves remained stable whereas ability levels of students increased markedly for institutions able to be more and more selective. Thus in a four-year period the SAT score for entering freshmen might increase as much as 100 points, but roughly the same proportions of students continued to receive A's and F's. Now the same process is happening in reverse. As enrollments drop admissions standards do likewise, but grading curves remain stable. In fact, recent evidence suggests that increasing proportions receive A's and B's.

In colleges and universities across the country almost the full ability range of these students receive BS and BA degrees, AS and AA degrees. Empire State aims to serve students across this range and is authorized to award both Associate and Bachelor degrees. If we are not in a position to carve out our own small piece of the continuum, how do we establish standards? If we adopt the typical normative approach across the full range of our students, then high proportions of those who normally attend and succeed in two-year colleges would have to be failed. If we establish different standards for different groups, replicating the typical distributions under our umbrella, as suggested by the dotted lines, then we create first; second; and third-class degrees for first; second; and third-class students--hardly a direction in which we want to move.

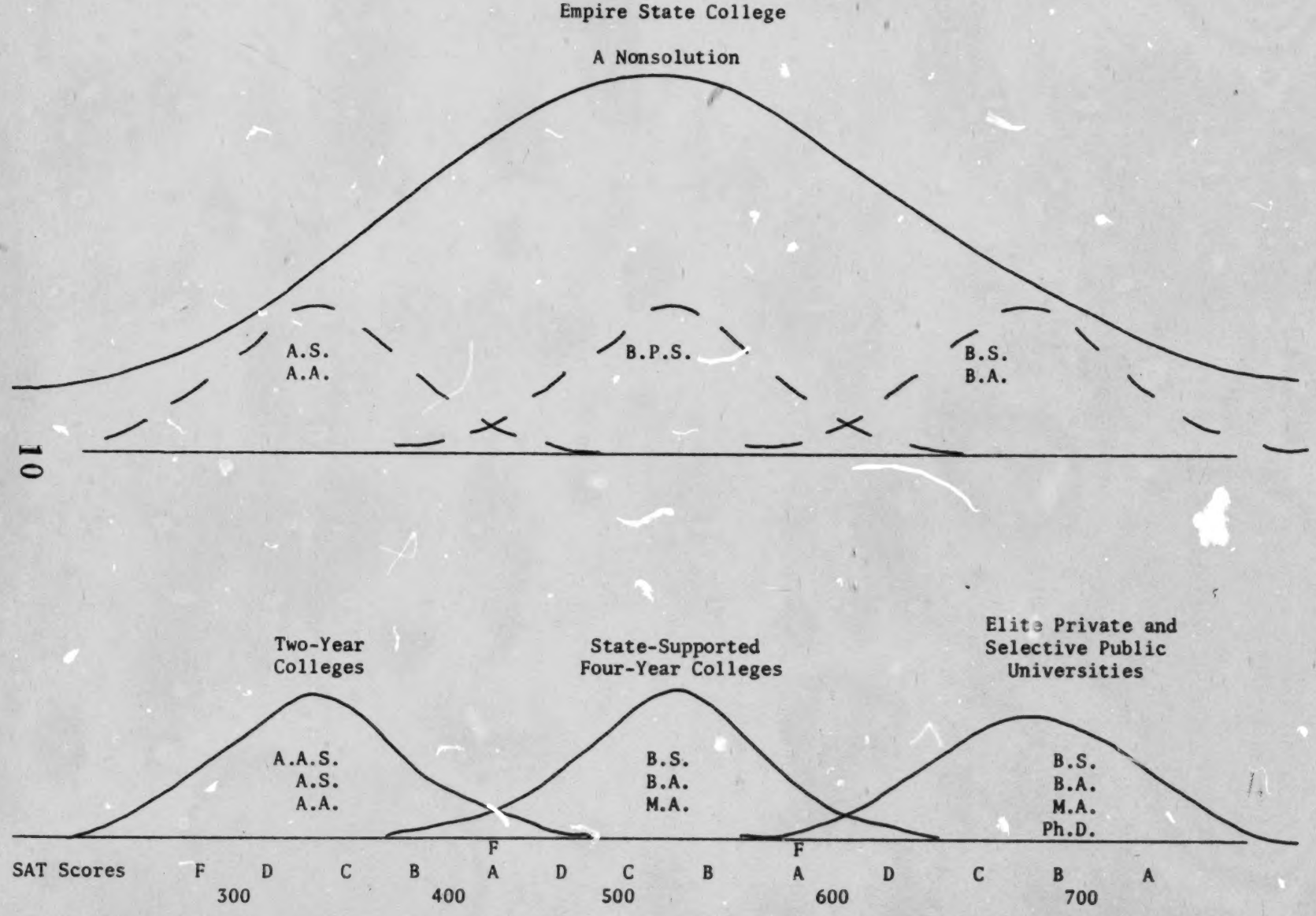
What is the solution? The problem is hitting higher education across the country as student diversity increases within both two- and four-year institutions.

Degree Definition

The criteria problem is exacerbated to the extent that there is a narrow

Figure 1

Ability Levels and Grading Curves



definition of legitimate college work. Pat Cross, research scholar at Berkeley and former president of the American Association for Higher Education, has put the matter well.

> We know that on any single dimension of human ability half of the students in the nation will be below average. Naive egalitarians have the notion that working with the bottom half will somehow raise them to equal status with the top half. Well, unfortunately, status in the society is relative, and on any single measure there will always be a lower half. The only way to reduce the number in the lower half is to expand the number of dimensions along which talent is measured.

Unfortunately, higher education in the past has recognized and tried to foster only a limited array of human abilities.

In colleges and universities the term "standards" is seldom used without the modifier "academic." Academic standards as they have been traditionally operationalized have put a premium on reading and writing and on the ability to memorize and manipulate verbal materials. To be sure, underneath this generalization there have been diverse curricular alternatives that recognize the need for additional kinds of competence and knowledge. The sciences and the arts as they are sometimes taught call for certain mechanical and psychomotor skills; teaching practices in the social sciences sometimes call for certain kinds of interpersonal competence. But basically higher education has been hooked on books, and verbal skills have been the sine qua non for effective performance.

Today, however, there is a widely recognized need to expand the range of student purposes and human potentials served by postsecondary education. Industry, labor, social agencies ask higher education to recognize and contribute to professional/vocational training for employees at all levels. Academics argue for more effective integration of liberal and professional education. To the extent that postsecondary education can respond to the need for training and integration, society is enriched by diversity; and the possibilities for individual contribution, self-expansion, and satisfaction are increased.

For these reasons Empire State aims to recognize a diversity of people as potential college students and a range of purposes as legitimate college pursuits, be they particular intellectual, vocational, or professional skills; knowledge and competence pertinent to various social problems; broader areas of intellectual competence; or more general dimensions of interpersonal competence and personal development. The College helps each student clarify his or her major focus for effort and develop high standards for performance in that area.

The College also recognizes that standards must vary from person to person and from purpose to purpose. A general normative approach cannot be used. The standards of the College will be sound to the degree that the standards established for each combination of individual abilities and purposes are sound. These standards are exercised within general guidelines for liberal arts and professional studies established by the New York State Education Department. Their range of variation is constrained both by individual and by collective faculty judgments concerning college-level work and degree-program

expectations. When a student aims to meet the requirements held by external certifying agencies, employers. graduate schools, and the like, the faculty tries to make these expectations clear. When asked to, faculty members will evaluate student performance in relation to external requirements, but the institution does not typically accept these external requirements as either the minima or maxima it may expect from a student. Thus the educational quality of Empire State's education ultimately depends on our ability to respond to significant dimensions of individual difference.

Given these critical aims, how do we come to grips with "standards"? How do we conceptualize individual differences so we recognize and act on them more effectively as mentors? as an institution?

So far we have relied almost entirely on an inductive approach. Our process confronts each mentor, review committee, and administrator with rich information about each student's educational purposes, background, strengths, and weaknesses. We respond as best we can, recognizing differences in reading and writing skills, in mathematical ability, in need for structure and ability to work independently. The research staff has developed a typology for considering program effectiveness and related costs. Can we now build on this experience by putting it against research and theory carried out elsewhere? And by so doing can we increase our capacity to recognize and act on individual differences more effectively -- both as an institution in terms of developing alternatives and resources and as individual mentors and administrators in terms of working directly with students?

I think we can. Research and theory concerning the major areas and stages of adult development is a good place to start. This approach is useful because (1) it identifies significant areas of individual difference; (2) it describes major dimensions of learning and development important to college students; and (3) it has powerful implications for students' educational motives, orientations toward knowledge, teaching practices, approaches to evaluation, and student-faculty relationships.

Knowledge of adult development, therefore, can provide a conceptual matrix useful to the College in its own development and useful to individual faculty members as they work with students. It can help us respond more effectively to concrete, immediate, instrumental purposes. It can also help us respond to more general purposes concerning intellectual competence and personal development shared by many of our students and articulated as outcomes valued by the College.

Three major areas provide a starting point: ego development, intellectual development, moral and ethical development. Part One suggests some relationships between these three dimensions of development and orientations toward knowledge, educational practices, and programmatic alternatives. Part Two describes these areas in more detail and introduces three others: interpersonal style, development of social interests, and development of purpose. Part Three suggests some potential contributions to moral and ethical development that can be made by philosopy, literature, drama, history, and the natural sciences.

PART ONE

ADULT DEVELOPMENT AND COLLEGE DEVELOPMENT

Can the major dimensions of adult development supply the building blocks on which College development can rest? Can the research and theory concerning major areas and stages of development and the life cycle help us think more soundly about both content and process? Can they clarify the larger motives behind the investments of time, money, and energy and the personal sacrifices made by most of our students? Can they show us the more fundamental purposes that power degree aspirations; pursuit of promotion or a career change; desire to meet new persons, read more widely, explore new ideas and interests?

When both students and faculty take account of the research and theory regarding adult development, will educational activities more often be on target, programs more effectively planned, and general issues concerning staffing, resources for learning, and evaluation more soundly settled?

ADULT DEVELOPMENT

The potential value of recognizing individual differences in development is brought home when their relationship to differences in motivation, orientations toward knowledge, and learning processes is examined. Figure 2 posits such relationships for four different levels of ego development, moral development, and intellectual development. Many teachers have experienced students who range across these differences. Many of us as mentors and advisors have tried to respond to these different motives, orientations, and learning processes even though we probably have not thought about our different students in precisely these terms.

Unfortunately, the labels used by theorists --self-protective, opportunistic, conformist, good-boy approval-oriented and the like -- are sometimes culturally loaded and pejorative for the persons so described. As we think through our own use of this research and theory we shall have to come to grips with that problem. Remember that those labels are shorthand for complex combinations or characteristics. Part Two describes these characteristics in more detail, and of course the original writings develop them much more fully.

These motives, orientations, and learning processes in turn define institutional functions or roles. Educational practices consistent with the learning processes are developed to carry out the institutional functions. Figure 3 extends Figure 2 to suggest these relationships.[1]

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[1]The relationships are consistent with substantial bodies of research and theory. The varied studies of cognitive styles, despite their diverse formulations and points of departure, find relationships similar to those indicated. Witkin's (1972) studies of field-dependent and field-independent students, for example, supports the suggested relationships proposed for different stages of ego development, moral development, and intellectual development. So do Stern's (1970) studies of authoritarians, anti-authoritarians, and rationals, and of relationships between student needs and educational environments. The work of Chickering (1969) and Chickering and McCormick (1973), Feldman and Newcomb (1969), Heath (1968), Katz (1968), and others concerning college impacts on student development also supports many of the postulated relationships.

Figure 2

Adult Development and

Motives for Education, Orientations toward Knowledge, and Learning Processes*

Ego Development	Moral Development	Intellectual Development	Motive for Education	What Is Knowledge?	What Use Is Knowledge?	Where Does Knowledge Come From?	Learning Processes
Self-protective Opportunistic	Obedience-punishment oriented	Knowledge (simple recall)	Instrumental; satisfy immediate needs	A possession that helps one get desired ends; ritualistic actions that yield solutions	Education to get: means to concrete ends; used by self to obtains effects in world	From external authority; from asking how to get things	Imitation; acquire information, competence, as given by authority
Conformist	Instrument egoism and exchange Good-boy approval-oriented	Comprehension Application	Impress significant others; gain social acceptance; obtain credentials and recognition	General information required for social roles; objective truth given by authority	Education to be: social approval, appearance, status used by self to achieve according to expectations and standards of significant others	From external authority; from asking what others expect and how to do it	
Conscientious	Authority-, rule-, and social-order-oriented	Analysis Synthesis	Achieve competence re competitive or normative standards; increase capacity to meet social responsibilities	Know how: personal skills in problem-solving; divergent views resolved by rational processes	Education to do: competence in work and social roles; used to achieve internalized standards of excellence and to serve society	Personal integration of information based on rational inquiry; from setting goals; from asking what is needed, how things work, and why	Discover correct answers through scientific method and logical analyses; multiple views are recognized but congruence and simplicity are sought
Autonomous	Social contact, legalistic-oriented Moral/principle orientation	Evaluation	Deepen understanding of self, world, and life cycle; develop increasing capacity to manage own destiny	Personally generated insight about self and nature of life; subjective and dialectical; paradox appreciated	Education to become: self-knowledge; self development; used to transform self and the world	Personal experience and reflection; personally generated paradigms, insights, judgments	Seek new experiences; reorganize past conception on the basis of new experiences; develop new paradigms; create new dialectics

*Note that just as each developmental stage incorporates and transforms earlier stages, so also does each subsequent level of motivation, orientation toward knowledge, and learning. Adapted from materials developed by Dr. Harry M. Lasker and Cynthia DeWindt, Harvard Graduate School of Education.

Figure 3

Individual Differences and Educational Practice*

Individual Differences				Educational Practice			
Ego Development	Intellectual Development	Motive for Education	Where does Knowledge Come From?	Institutional Function	Teaching Practice	Student-Teacher Relationships	Evaluation
Self-protective Opportunistic	Knowledge (simple recall)	Instrumental; satisfy immediate needs	From external authority; from asking how to get things	Arouse attention and maintain interest; to show how things should be done	Lecture-exam	Teacher is authority, transmitter, judge; student is receiver, judged	By teacher only
Conformist	Comprehension Application	Impress significant others; gain social acceptance; obtain credentials and recognition	From external authority; from asking what others expect and how to do it	Provide predetermined information and training programs, certify skills and knowledge	Teacher-led, dialogue or discussion		By teacher only
					Open "leaderless," "learner centered" discussion	Teacher is a "model" for student identification	By teacher and peers
Conscientious	Analysis Synthesis	Achieve competence re competitive or normative standards; increase capacity to meet social responsibilities	Personal integration of information based on rational inquiry; from setting goals; from asking what is needed, how things work, and why	Provide structured programs that offer concrete skills and information; opportunities for rational analysis; and practice, which can be evaluated and certified	Programmed learning, correspondence study, televised instruction	"Teacher" is an abstraction behind system; student a recipient	By system
Autonomous	Evaluation	Deepen understanding of self, world, and life cycle; develop increasing capacity to manage own destiny	Personal experience and reflection; personally generated paradigms, insights, judgments	Ask key questions; pose key dilemmas; confront significant discontinuities and paradoxes; foster personal experience and personally generated insights	Contract learning, 1: time, objectives, activities, evaluation negotiated between student and teacher at the outset and held throughout	Student defines purposes in collegial relationship with teacher	By teacher, peers, system, self; teacher final judge
					Contract learning, 2: time, objectives, activities, evaluation defined generally by student, modifiable with experience	Teacher is resource, contributes to planning and evaluation	By teacher, peers, system, self; self final judge

*See Figure 2 for more detailed outline of "Individual Differences."

How can we focus on one or two developmental levels, when our students span the full range? Educational practices at many institutions are oriented toward the opportunistic or conformist levels of ego development and to the memorizing, applying, and analyzing levels of intellectual development. They treat education as though it were a commodity, a collection of discrete items, packaged in a few standard-sized boxes, sold by the Carnegie credit. Buy a cartful, pick up your green stamps as you are checked out, and move on. It is not by chance that the supermarket has been an appealing metaphor for some educators and that curricula committees and academic departments, like merchandizers, talk primarily about this or next year's offerings in the light of shifting student interests.

How many curricula, courses, classes, seminars, examinations help students build knowledge from personal experiences and personally generated syntheses and paradigms? How many teachers in the natural sciences, the humanities, and the social and behavioral sciences help students not only to acquire basic concepts, competencies, and knowledge, but also to use those learnings to make some sense of life and of themselves in it, to generate personal insights through subjective and dialectical processes? Certainly many students are not prepared or motivated for that level of work. But of those who are, how many are recognized and responded to accordingly? And how often are explicit efforts made to help students achieve the ability and desire to move toward application and insight?

Many institutions treat truth as objectively real, modeled, given by authority, or "discovered" by logical or scientific analyses. Conceptions concerning the nature of knowledge, where it comes from, and how it is to be used emphasize acquiring information or competence in order to satisfy immediate needs, to obtain immediate benefits, to do a particular job, to fill a particular role, to achieve intellectual and personal growth. Current changes toward competency-based programs create closer correspondence between objectives, educational activities, and outcomes, and specify more apposite criteria for evaluation. Greater "truth in packaging," and more effective education for some students may result. But many competency-based programs address the same developmental levels as the typical system.

Adult Development and Teaching Practices

The relationships become more apparent when explicit teaching practices, student-faculty relationships, and orientations toward evaluation are addressed. The lecture-examination system as often practiced is responsive to the fearful-dependent, opportunistic, and conforming-to-persons levels of ego development and to the obedience-punishment, instrumental egoism and exchange, and good-boy orientations of moral development. The key dynamic here is the comfortable fit between (1) the student's disposition to identify with persons in authority, to accept their definitions of right and wrong, to avoid punishment by deferring to their power; and (2) the teacher's assertion of authority, an emphasis on dispensing information for students to memorize, and use of exams to punish wrong answers and reward right ones. When the lecture-examination approach goes beyond the personal authority of the teacher and makes use of more abstract authority, as often is the case, then the approach moves to an authority-, rule-, and social-order-oriented level. Here it is the system that defines right and wrong. The same authoritarian or authoritative dynamic occurs except that it is more generalized. The lecture can also provide an opportunity

for the teacher to model skills of analysis, synthesis, and evaluation, and to ask students to go through similar exercises. There also are some "right answers" useful for many students. So we need to recognize the potential values of this teaching approach as well as the limitations that characterize typical practices.

Socratic dialogue, or teacher-led discussions, respond to the opportunistic, instrumental egoism and exchange level. They provide rich information about the teacher's views and permit students to shape their own responses accordingly, receiving immediate rewards through the satisfying exchanges that result. Open, "leaderless," "learner-centered" discussions often suit the conforming-to-persons, approval orientation where sensitivity, pleasing and helping others, acceptance of group decisions are called for. Programmed learning, correspondence study, and most other forms of "mediated instruction" currently used fit well the authority, rule, and social-order orientation.

Contract learning can take two forms. In one form the objectives are set by the student; but the time, activities, and criteria for evaluation result from negotiations between the student and teacher. The contract is a commitment to the plan developed, and the plan is to be held to throughout unless major events call for renegotiation. This approach to contract learning best fits the principled autonomous stages of ego development and the social contract, legalistic orientation of moral development. In the second form of contract learning the student, with or without help from the teacher and others, defines the objectives, time, activities, and criteria for evaluation. The "contract" may be quite specific or very general. In either case it will be held to flexibly and modified in the light of experience as it is pursued. This approach to contract learning best fits the principled autonomous stage and moral/principle orientation.

Of course, contract learning can be highly teacher-controlled and authoritarian, not only in terms of learning activities and evaluation, but also in terms of the purposes judged acceptable. Furthermore, skilled teachers can use lectures and exams, seminars, and group discussions in ways that challenge autonomous students and also serve opportunistic, conformist, and conscientious ones. The assertions made above rest on studies of student responses to typical teaching practices. There are exceptional teachers, courses, classes, seminars, and discussion groups. Most of us have experienced them, but they are exceptions to the general fare.

The different teaching practices also are expressions of different approaches to student-teacher relationships and evaluation. The teacher as an authority, transmitter, socializer, judge, who carries sole responsibility for evaluation, best fits the obedience-punishment and the opportunistic, instrumental egoism stages. Where the teacher is a model, known well enough to permit student identification, and where evaluation includes fellow students as well as the teacher, the fit is with the conformist approval-oriented stage. In programmed learning and other forms of mediated instruction the teacher is an abstraction behind the system. Criteria for evaluation are specified by the system and responses are usually mechanically scored, often by machines. In contract learning the teacher is a resource person who contributes to planning and evaluation. The relationship may be more or less collegial, and the student may carry more or less responsibility for defining the program and for evaluation, depending on the approach used. The patterns of relationship and approaches to learning and evaluation in contract learning best fit the principal autonomous stages of ego development and moral development.

Many questions need to be raised about the categorical assignments made in Figures 2 and 3, and about the categorical statements in the paragraphs above. Experienced teachers undoubtedly will find things to take exception to -- and should. Any boxing of persons and educational practices surely compromises the complexity of both. Such oversimplifications need to be met with questions, exceptions, counterarguments, and clarifications. In particular, we should recognize these two points:

1. Autonomous students who are intellectually competent and skilled in interpersonal relationships can turn most teachers and learning environments to good use. Their behavior during lectures, preparation for exams, use of mediated instruction, conversations with fellow students -- all will differ from their conformist or self-protective peers. So they will not necessarily experience those teaching practices in the same ways or be similarly influenced by them.

2. The match-ups between the student's status and the educational setting or practice may work well for acquiring certain kinds of knowledge and competence, but they may not help foster student change from one level of development to the next. The limited research and experience available to date suggests that change from one developmental level to the next occurs most readily when a student encounters intellectual challenges, moral dilemmas, and interpersonal environments one stage above that at which she or he normally functions. When the gap is greater than one level, change seems less likely to occur.

Is "Higher Development" Better?

Is it "better" to be at a "higher" stage of development? Is it better to be autonomous, to operate in terms of moral principles, to function at more complex intellectual levels?

ESC's degree expectations make clear the values the College holds with respect to ego development, moral development, and intellectual development. It stands ready to help students in these areas, directly or indirectly, while they pursue more immediate instrumental concerns. Whether a contract or a degree program aims to achieve certain kinds of straightforward knowledge and skill, or whether it aims to enable more general changes in ego development, moral and ethical development, or intellectual development, depends on the particular purposes a student brings and how these are addressed in the light of ESC's degree expectations. Is this a sound position? How do we think about it intelligently?

We have little disagreement, though perhaps we should have more, regarding intellectual development. We assume that intellectually complex and competent persons can operate effectively over a wider range of problems than persons who are less so. And we assume this is good.

But we have more reservations in other areas. They are often especially strong concerning moral and ethical development. John Wilson, Lecturer at Oxford, addresses the issue this way:

> Performance in the moral area is surely not wholly <u>arbritary</u>. For instance, it seems clear that prin-

ciples like "face facts," or "get to know yourself and other people" are required by anybody who is going to evolve his own moral beliefs in a serious and sensible way. Similarly qualities we may call "self-control" or "being able to act on one's own decisions" seem to be required by any person, whatever his particular moral values. If someone abandoned such general principles as these, we should say--not that we disagreed with his particular moral values, but that he was not taking morality seriously at all. . . .

This is a matter of logic (or, if you like, common sense); it does not rest upon any particular creed, or faith, or an axiom. Such principles as "facing facts," "not contradicting oneself," gaining understanding and so forth do not rely on any intuition or revelation. They are part of what it means to be a thinking human being, as opposed to an animal or a psychopath. Understanding and following such principles is part of what we mean (or should mean, if we were clearer) by "being educated" in morality and other areas of life. They are an expansion of the concept of education itself, not a set of particular moral values. I repeat this because it is just as important that students and pupils grasp this as educators should. They, and we, would rightly resent any attempt to foist a particular morality or faith on them, but no one can sensibly object to clarification of what it means to be educated in the moral area. Unless the distinction is firmly grasped, I fear that much moral education will be ineffective (as well as illegitmate).

(Collier, Wilson, and Tomlinson, 1974, pp. 7,8)

That line of thought argues that higher development is better in terms of self-understanding, self-control, clarity of thought, and rationality.

But we need to recognize that it is not better in other respects. There is no evidence to indicate that increased happiness, adjustment, or mental health is associated with higher levels of development. Loevinger puts it this way:

> There is a temptation to see the successive stages of ego development as problems to be solved and to assume that the best adjusted people are those at the highest stages. This is a distortion. There are probably well adjusted people at all stages. . . . Probably those who remain below the conformist level beyond childhood can be called maladjusted. . . . Some self-protective, opportunistic persons, on the other hand, become very successful. . . . Certainly it is a conformist's world, and many conformists are very happy with it though they are not all immune to mental illness.

Probably to be faithful to the realities of the case one should see the sequence as one of coping with increasingly deeper problems rather than as the successful negotiation of solutions.

(1970, p. 7)

COLLEGE DEVELOPMENT

The relationships set forth in Figures 2 and 3 suggest a way to think about individual differences and individual learning. Any institution serving a diverse range of adults will have students at different developmental stages ranging from opportunistic to autonomous levels of ego development, from obedience-punishment orientation to moral/principle orientation in moral development, and from concrete operations and memorization to complex formal operations, synthesis, and evaluation in intellectual development.

Because of this diversity an institution cannot simply pitch its educational program at a particular stage or limit it to a particular area. It must develop the capacity to serve the full range, to respond knowledgeably to the diverse students served and to help them pursue the kinds of learning and development that both they and the College value.

College development needs to proceed on two fronts: professional development of administrators (including non-teaching professionals) and faculty and programmatic development that creates learning alternatives and resources suitable to individual differences in age and stages of development. A research effort that evaluates educational outcomes as a function of interactions among student characteristics, faculty characteristics, and learning activities needs to accompany such development.

Professional Development

Empire State asks administrators as well as faculty members to have, and to develop further, areas of academic competence and pertinent administrative or mentoring skills. Development in these two areas of professional competence needs to be accompanied by broad-guaged personal development that helps each staff member address life-cycle concerns and progress in broad areas of development important to him or her. The research and theory concerning ages and stages of development applies to each of us as well as to the contemporaries we serve as students. Faculty members and administrators experience personal and professional transitional periods and changes in emphasis and orientation with increasing age, just as does the rest of the population. And surprising--or obvious--as it might seem to some, most of us still have some running room when it comes to ego development, intellectual development, moral and ethical development, interpersonal style, social interest, and clarity of purpose. More explicit attention to the research and theory concerning adult development and systematic

efforts to use that information in ways that enable our own progress can provide a context that also contributes richly to improved understanding of the individual differences that exist among our students.

Understanding of, and sensitivity to, individual differences is most critical for persons working most closely with students: mentors, unit coordinators, associate and assistant deans, deans. The flexibility provided by contract learning, multiple alternatives, and diverse resources will be lost or misused if those persons cannot help students make sound choices in the ways they pursue their education. But this kind of understanding also is important for Coordinating Center professionals. Although their decisions may have less immediate consequence for particular students, they have more long-range and general consequences for large numbers. So professional development needs to occur for mentors and administrators in the centers and for Coordinating Center professionals.

Professional development needs to close two gaps: the gap between what we know and what we do, and the gap between what we know and what we need to know to do better. Concern about professional development need not imply that we're incompetent or derelict. It does recognize that we are trying to do a complicated job that no one knows how to do very well as yet. We are trying to develop a new approach to education that truly provides individual education, and to develop the new professional roles and abilities necessary to carry that approach forward. So none of us need be ashamed to admit that we have things to learn and that we can find ways to perform better with the knowledge we already have.

There is a rough division of labor between the Office of Policy Analysis and Evaluation and the Office of Academic Affairs. The Office of Policy Analysis and Evaluation works to close the gap between what we know and what we need to know more about in order to do better; the Office of Academic Affairs helps us close the gap between what we know and what we do. Both these Offices work in cooperation with the Office of the President, which has primary responsibility for College development.

The Office of Policy Analysis and Evaluation contributes to professional development by identifying research, theory, and experiences of other institutions concerning student characteristics, cognitive styles, individual differences, and other pertinent information. This information is shared with appropriate working groups and interested audiences. Special analyses and reports are prepared on the basis of ESC's own research and experience. A start has been made in developing interinstitutional relationships that permit faculty members to move into other settings where they can profit from exchanges with a different set of colleagues, make contributions from their own experiences, and push their own thinking further about issues important to them and to the College.

The Office of Academic Affairs contributes to professional development by regular meetings with the Associate Deans, the Academic Policy and Learning Program Committee, the Academic Personnel Committee, and other groups that aim to bring policy and practices closer together, to modify policies as needed, and to improve quality of contracts, degree programs, and the assessment process. Personnel decisions concerning renewal, promotion, and tenure provide additional opportunities to reward and encourage excellent performance. A system of professional reassignments and sabbaticals provides a vehicle that focuses directly on professional development.

The Office of Research and Evaluation is collecting information on student characteristics at entrance (Student Biographical Inventory), educational activities and experiences while at the College (Student Experience Questionnaire); and outcomes at, and after, graduation (Graduate Follow-Up Questionnaire), which are pertinent to the developmental areas. The data available so far (see, for example, What's Happening; Educational Outcomes from Contract Learning at ESC; and Marrieds and Singles: Two Different Worlds) suggest that students do differ and that ESC's educational program generates behavior by students consistent with our objectives and different from that that typically occurs elsewhere. This research can help us know more clearly the kinds of and range of student differences we need to recognize and the consequences of our varied attempts.

The Center for Individualized Education, although it is part of the Office of Policy Analysis and Evaluation, works closely with the Office of Academic Affairs and the Office of the President and helps close both gaps. Resource materials available, under development, and on the drawing board--TV tapes, casebooks of contracts and degree programs, illustrative materials and theoretical principles concerning evaluation, formulations concerning mentor careers--will be available for collegewide and local use. These materials make use of our own experiences and expertise. They bring together good and bad examples in which we recognize our own strengths and weaknesses and see how others have tackled similar kinds of students. They illustrate varied uses of diverse resources, different methods and criteria for evaluation, different types of student-mentor interactions. Although outside consultants may be used occasionally, the Center relies principally on the competence and experience of our own staff. Our own faculty members and administrators are primary resources for workshops and seminars. Small grants support release time to develop the array of materials needed for our own use, with a two-fold effect: pertinent materials are developed that meet our needs, and professional development occurs in the process of creation--both for the creator and for those consulted along the way.

The College is well-positioned to pursue professional development activities that will build a strong foundation for improving individual education, for developing this new approach to higher education, and for creating the new professionals needed to carry it forward. Many of these activities are just getting underway. As they gather momentum the excitement and challenge experienced during the first years of the College should continue.

Program Development

Professional development needs to be accompanied by programmatic development that generates alternatives appropriate for the full range of adult students seeking postsecondary education. We need alternatives that serve students at autonomous and conscientious levels, but we cannot limit ourselves simply to those persons. Many opportunistic and conformist students come to postsecondary education with important purposes that deserve to be met. These students should not be ignored, turned away, or turned off. Alternatives suitable for them should be available as well. Perhaps we can conceive of program development as a continuing attempt to improve the fit between our educational alternatives and the needs of our diverse students, defined in terms of research and theory concerning adult development.

At the same time we need to recognize that access to some alternative is usually better than no access at all. Therefore, under certain circumstances we may not be able to achieve the ideal match between the available educational options and the needs and characteristics of particular kinds of students. But the more knowledgeable we are about the compromises forced by reality the better positioned we are to make sound trade offs and work for continued improvement.

Figure 4 suggests some relationships among various programmatic alternatives and the major dimensions of individual differences. It builds on Figures 2 and 3, matching in rough fashion the different areas and stages of development, different motives, orientations toward knowledge, learning processes and educational practices, with our current alternatives, Master Plan proposals, and some future possibilities. It should be emphasized that the objective here is not to box in any alternatives. On the contrary, the objective is to test a way of thinking about various alternatives to see whether by so doing we can increase the effectiveness and expand the range of each, and thereby the College as a whole.

Before discussing those match-ups, let's note a few key assumptions:

1. Empire State's primary aim is to develop educational alternatives responsive to the needs of diverse students. If that aim is taken seriously our students will span the full range of areas and levels of adult development, the full range of motives, orientations toward knowledge, and learning processes.

2. A program that serves opportunistic or conformist students whose purposes aim to satisfy immediate instrumental needs, to obtain credentials, or to impress others, is just as worthy of support as one that serves conscientious or autonomous students pursuing different purposes. (Remember that those labels concerning student types are shorthand for complex constellations of characteristics. Refer to the appropriate sections of Part Two for fuller descriptions.)

3. Autonomous and conscientious students generally can make use of programmatic alternatives and learning environments that serve opportunistic or conformist students, but conformist or opportunistic students cannot so readily make use of alternatives that call for the characteristics associated with conscientious or autonomous students.

4. Programmatic alternatives and environments designed for conscientious and autonomous students can usually be more readily adapted to the characteristics and needs of conformist and autonomous students than vice versa.

Current Alternatives. Contract learning, group studies, and the Independent Study Program have been staples with us from the outset. The new effort in residencies is well underway and the Extended Program will be taking its first students soon.

Contract learning, with the right kind of institutional arrangements, can respond to the full range of student differences. A mentor who is sensitive to individual differences and who operates in ways consistent with the guidelines of the President's Committee on Academic Quality can incorporate lectures and

exams, programmed learning, television programs, individually designed readings and writings, field experiences, and the like in combinations appropriate to the developmental levels, motives, and orientations of each student. This adaptability enables contract learning to be the basic building block for the College program. But to realize the full potential of contract learning, those diverse resources and alternatives need to be in the working knowledge of the staff and readily available to students. By strengthening them and increasing their availability, we strengthen the learning processes made available by the College.

Group studies, when carried out in ways consistent with College policies, are most appropriate for autonomous and conscientious students. The strength of these groups resides in their high levels of student self-determination, their flexibility and openness. This context encourages exchange of divergent views and personally generated insights. They are not typically limited to simply acquiring information or developing particular skills. More often the groups pose key questions or confront contradictions or dilemmas. They permit personal experiences and emotions as well as relevant information to be brought to bear. Differences may be resolved or left unresolved. The process may be more or less rational and evidential. Intellectual skills of analysis, synthesis, and evaluation are called for more often that rote memory or straightforward comprehension and application.

Conformist or opportunistic students do not generally find their educational needs well satisfied by such groups. The lack of clearly defined objectives and clear structure, the tangents and asides, the diffusion of leadership and authority, and the infrequent systematic presentations of information, do not respond to their concern to acquire concrete knowledge and skills that will be of immediate use or that are judged important by others. For such students more typical classes, seminars, and teacher-led discussions seem to work better. Given our own limited ability to staff a wide range of such classes and seminars, working relationships that permit easy access to such alternatives at other institutions provide important supplements to the group studies we can offer ourselves.

Residencies tend to operate in ways consistent with our group-studies policies. Although they are topically organized with various readings and other mediated information recommended in advance, the emphasis in the residencies themselves is more on the exchange of ideas and experiences in relation to the major topic under consideration than on information transmission per se. The rich interaction among students and resource persons, the degree to which various views and values can be fully explored and understood, the intensity of the experience that results from total immersion, creates a learning environment in which autonomous and conscientious students can function well. Residencies can provide varying degrees of structure, support, and guidance by establishing subgroups, particularly when they extend through several days, a week, or more. This flexibility permits a wider range of students to connect effectively with them. Even so, unless a residency is designed to meet explicitly the needs of conformist or opportunistic students, they are apt to have more difficulty in achieving their goals than others who are more ready to engage with the multiple views, ambiguities, and dialectical processes that give such power to that alternative.

Of course, there is no reason why residencies cannot be designed to focus on acquiring information and developing particular kinds of competence. The question is whether such an approach is the most efficient and effective way to respond to such purposes. For some students, given the practical

Figure 4

Individual Differences, Educational Practice, and Programmatic Alternatives

Individual Differences

Ego Development	Intellectual Development	Motive for Education	What is Knowledge?	What Use is Knowledge?	Where does Knowledge Come From?	Learning Process
Self-protective Opportunistic	Knowledge (simple recall)	Instrumental; satisfy immediate needs	A possession that helps one get desired ends; ritualistic actions that yield solutions	Education to get: means to concrete ends; used by self to obtain effects in world	From external authority; from asking how to get things	Imitation; acquire information, competence, as given by authority
Conformist	Comprehension Application	Impress significant others; gain social acceptance; obtain credentials and recognition	General information required for social roles; objective truth given by authority	Education to be; social approval, appearance, status used by self to achieve according to expectations and standards of significant others	From external authority; from asking what others expect and how to do it	
Conscientious	Analysis Synthesis	Achieve competence re competitive or normative standards; increase capacity to meet social responsibilities	Know how: personal skills in problem-solving; divergent views resolved by rational processes	Education to do: competence in work and social roles; used to achieve internalized standards of excellence and to serve society	Personal integration of information based on rational inquiry; from setting goals; from asking what is needed, how things work, and why	Discover correct answers through scientific method and logical analyses. Multiple views are recognized but congruence and simplicity are sought
Autonomous	Evaluation	Deepen understanding of self, world, and life cycle; develop increasing capacity to manage own destiny	Personally generated insight about self and nature of life; subjective and dialectical; paradox appreciated	Education to become: self-knowledge; self development; used to transform self and the world	Personal experience and reflection; personally generated paradigms, insights, judgments	Seek new experiences; reorganize past conception on the basis of new experiences; develop new paradigms; create new dialectics

Figure 4 (continued)

Individual Differences, Educational Practice, and Programmatic Alternatives

Ego Development	Teaching Practice	Student-Teacher Relationships	Evaluation	Programmatic Alternatives: Current Alternatives	Programmatic Alternatives: Master Plan Proposals	Programmatic Alternatives: Future Possibilities
Self-protective Opportunistic	Lecture-exam	Teacher is authority, transmitter, judge; student is receiver, judged.	By teacher only			
Conformist	Teacher-led, dialogue or discussion		By teacher only	Independent study		Programmed learning
	Open "leaderless," "learner centered" discussion	Teacher is a "model" for student identification	By teacher and peers	Ascent of Man		Computer-assisted instruction
Conscientious	Programmed learning, correspondence study, televised instruction	"Teaching" is an abstraction behind system; student a recipient	By system	Extended Program	Teacher certification Program in science, math, and technology. Individualized masters degree	Statewide television
Autonomous	Contract learning, 1: Time, objectives, activities, evaluation negotiated between student and teacher at the outset and held throughout	Student defines purposes in collegial relationship with teacher	By teacher, peers, system, self; teacher final judge	Residencies Group studies Contract Learning	Evaluation Center Comparative cross-cultural education Workshop on community problems	
	Contract learning, 2: Time, objectives, activities, evaluation defined generally by student, modifiable with experience	Teacher is resource, contributes to planning and evaluation.	By teacher, peers, system, self; self final judge		Urban Study Center Adult Learning Center	

realities of their home and work situations, such an alternative may be the only way such learning can be made accessible. When that is the case, those needs ought to be identified and addressed accordingly. In general, however, residencies probably are best designed on the assumption that autonomous and conscientious students will be the primary constituency.

The courses currently available through the Independent Study Program focus heavily on providing information, concepts, and insights pertinent to a particular discipline or professional/vocational area. These courses are typically designed according to a conception of the field held by a particular faculty member, and the arrangements for evaluation test the degree to which a student has understood the views presented. The student who is motivated to do so can take those views or leave them, can add that information to his or her own store of knowledge and use it to enrich and modify his or her own views. But the materials and evaluation processes themselves do not provide powerful impetus for such activities. The Ascent of Man, except as it is amplified by particular activities added by Empire State faculty members and printed materials, essentially falls into the same pattern.

The Extended Program, as it is currently envisioned, seems to fit conscientious and conformist students best. Students build their degree programs and learning contracts by selecting among various Independent Study courses, modules, and other resources. These have been organized in various combinations to provide systematic educational experiences designed to help students acquire competence and knowledge pertinent to particular disciplinary or professional/vocational interests. Opportunities for analysis, synthesis, and evaluation of multiple views can be provided; but the more limited resources for exchanges with other students and with professional staff reduce the impetus to confront key issues by examining one's own prejudices and predispositions. A basic challenge for the Extended Program will be to realize the increased access made possible for conformist and conscientious students and at the same time create arrangements where autonomous students can pursue their learning in ways that respond to their learning processes and satisfy the more general purposes that motivate their study.

Master Plan Proposals. The present formulations concerning Master Plan proposals are sufficiently general that detailed discussion is difficult. As they are presently described, they look most appropriate for conscientious and autonomous students who bring substantial intellectual competence to their work.

The proposals concerning teacher certification; science, mathematics, and technology; and the masters degree share a commitment to certain kinds of competence and knowledge judged necessary for successful achievement in those areas. Thus the content is apt to be quite clearly specified, although the learning processes and resources by which particular kinds of competence and knowledge are achieved may be quite flexible. The challenge here will be to develop those alternatives in ways that provide sufficient authority, direction, concrete skills, and knowledge for opportunistic and conformist students and at the same time provide sufficient choice and flexibility that more experienced and autonomous students can work fruitfully in terms of their own styles and needs.

The proposals for an Evaluation Center, an Urban Study Center, comparative cross-cultural education, workshop in community problems, and an Adult Learning Center seem to be pitched primarily for autonomous students. Relative to the other proposals, they are more open to individual variability in both content and process. The challenge here will be to design such alternatives in ways that permit other kinds of students to use them effectively.

The basic question for the Master Plan proposals is whether the descriptors of individual differences in development, motives, orientations toward knowledge, and educational processes help us create alternatives so that the full range of our diverse students can be served. Can we apply this information in ways that help us design better initially and monitor outcomes so that we maximize the educational benefits for each student who comes to us?

Future Possibilities. The alternatives currently available and those proposed in the Master Plan seem to be heavily weighted in the direction of of conscientious and autonomous students. Would our efforts to serve the diverse students who seek postsecondary education be enhanced if we developed some additional alternatives that spoke more directly to the needs of opportunistic and conformist students, that is, students who are basically oriented toward acquiring concrete skills and information, whose motives do not extend far beyond a desire for credentials that will improve their income and enhance their status? These are legitimate purposes and deserve to be met.

Statewide television courses, programmed learning, and computer-assisted instruction can help serve them. Does it make sense for Empire State to try to develop such alternatives? If the primary mission of Empire State is to serve the SUNY system by creating alternatives that will meet the State's diverse needs for postsecondary education, the answer probably should be "yes." Can these ways of thinking about the student to be served help in that mission? Can they help provide a basis for thinking about our own priorities and the uses to which we put our our limited resources? Can they help us develop the wide array of program alternatives and learning resources necessary if life-long learning is to become a reality?

PART TWO

MAJOR DIMENSIONS OF ADULT DEVELOPMENT

Can the major dimensions of adult development supply the building blocks for college development? Part One pursued that question by exploring the implications of three dimensions of development for student motives, orientations toward knowledge, educational practices, professional development, and program development. Part Two provides more detailed information concerning ego development, intellectual development, and moral and ethical development. It also presents information about three other areas: interpersonal style, development of social interest, and development of purpose. Finally, some results from current life-cycle research are described.

The narrative sections are brief because most of the substance is in the Figures, which show relationships among theorists more effectively and economically than straight prose.

DEVELOPMENTAL STAGES

Ego Development

Figure 5 summarizes several theorists who have conceptualized comprehensive stages of development. Loevinger describes their general similarities:

> All of the conceptions project an abstract continuum that is both a normal developmental sequence and a dimension of individual differences in any age cohort. All represent holistic views of personality and all see behavior in terms of meaning or purposes. . . . All are more or less concerned with impulse control and character development, with interpersonal relations, and with cognitive preoccupations, including self-concept.
>
> (1970, p.3)

Loevinger gives us a general sense of the later stages:

> More people have recognized this [conformity] stage than any other. Here the child identifies himself with authority, his parents at first, later other adults, then his peers. This is the period of greatest cognitive simplicity. There is a right way and a wrong way, and it is the same for everyone all the time, or for broad classes of people. . . . What is conventional and socially approved is right. . . . Rules are accepted because they are socially accepted. . . . Disapproval becomes a potent sanction. There is high value for friendliness and social niceness. Cognitive preoccupations are appearance, material things, reputation, and social acceptance. . . . People and one's own self are perceived in terms of social group classifications. Individual differences are scarcely perceived. The way things or people are and the way they ought to be are not sharply separated. . . . People in the

Figure 5

Author	Amoral	Fearful Dependent	Opportunistic	Conforming to Persons	Conforming to Rule	Principled Autonomous
			Ego or Character Types			
Peck & Havighurst (1960)	1. amoral		2. expedient	3. conforming	4. irrational-conscientious	5. rational-altruistic
C. Sullivan, Grant & Grant (1957)	[1]1 presocial	[1]2 passive-demanding	[1]3 conformist (exploitative)	[1]3 conformist (cooperative)	[1]4 authoritarian guilty	[1]6 self-consistent [1]7 integrative
Harvey, Hunt & Schroeder (1961)	Sub-1	1. absolutistic-evaluative	2. self-differentiating	3. empathic		4. integrated-independent
Loevinger (1970)	1. presocial symbiotic	2. impulse-ridden, fearful	3. self-protective	4. conformist	5. conscientious	6. autonomous integrated
Vanden Daele (1968)	1. excitation-oriented	3. conflict-avoidant	5. peer and reciprocity oriented	6. social conformist	7. duty and responsibility	8. independent agent orientation 9. self-social integration

[1]Adapted from Kohlberg, 1973, p. 46

conformist state constitute either a majority or a large minority in almost any social group. . . . The transition between the conformist and the conscientious stages is marked by heightened consciousness of self and of inner feelings. The transition appears to be modal for students during the first two years of college. A related aspect of the transition is perception of multiple possibilities in situations. Rules are seen to have exceptions or to hold only in certain contingencies. Inner states and individual differences are described in vivid and differentiated terms. One feels guilty now primarily when one has broken a rule, but when one has hurt another person. Motives and consequences are more important than rules per se. Long term goals and ideals are characteristic; ought is clearly different from is. . . . He is aware of choices; he strives for goals, he is concerned with living up to ideals and improving himself. The moral imperative remains, but it is no longer just a matter of doing right and avoiding wrong. There are questions of priorities and appropriateness. . . . Achievement is important, and it is measured by one's own inner standards rather than being primarily a matter of competition or social approval.

The transition from the conscientious to the autonomous stage is marked by a heightened sense of individuality and a concern for emotional independence. The problem of dependence-independence is recurrent throughout ego development. What characterizes this transitional stage is the awareness that even when one is no longer physically and financially dependent on others, one remains emotionally dependent. . . .

The autonomous stage is so named partly because one recognizes other people's need for autonomy, partly because it is marked by some freeing of the person from the often excessive striving and sense of responsibility during the conscientious stage. Moral dichotomies are no longer characteristic. They are replaced by a feeling for the complexity and multifaceted character of real people and real situations. There is a deepened respect for other people and their need to find their own way and even make their own mistakes. . . . We do not believe that inner conflict is more characteristic of the autonomous stage than of lower stages. Rather, the autonomous person has the courage to acknowledge and to cope with conflict rather than blotting it out or projecting it onto the environment. The autonomous person is concerned with social problems

> beyond his own immediate experience. He tries to be realistic about himself and others.
>
> In most social groups one will find no more than 1%, and usually fewer, at our highest or integrated level. . . . Only a few individuals reach the stage of transcending conflict and reconciling polarities that we call the integrated stage.
>
> (1970, pp. 4-6)

These Loevinger quotations give a general sense of the major stages of adult development. While there are differences in terminology and in significant details, the level of agreement among theorists is sufficiently strong and broadly based to provide one set of solid information.

Figure 6 shows how Loevinger describes her general stages in terms of four major dimensions: impulse control, character development; interpersonal style; conscious preoccupations; cognitive style. Changes in developmental stage require changes in these four major areas. Change need not necessarily occur simultaneously or in precise one-to-one fashion, but if there is little development in one dimension, further development in the others is restricted. Living by self-evaluated standards is difficult if one is still powerfully preoccupied with appearance and social acceptability. Differentiated feelings and motives, or respect for the autonomy of others, cannot be readily achieved if one is still in the grips of stereotypes and cliches.

These major dimensions of ego development posited by Loevinger suggest more concrete ways we can think about individual differences and individual learning. Others have pursued several of these major areas in more detail.

Intellectual Development

Intellectual development, termed "cognitive style" by Loevinger, is the area most familiar to teachers. Figure 7 juxtaposes Loevinger's formulations with those of Piaget and Bloom (1956). Although the different formulations vary in their degree of specificity, the general agreement among these theorists is quite high. They share a developmental sequence that moves from (a) intuition and memorization, through (b) recognition of relationships among events, instances, and classes, to (c) intellectual processes that construct combinations of relationships, that isolate variables or create new combinations or groups, and that culminate in the ability to (d) create new syntheses and evaluate the results.

The detailed elaborations of Bloom et al. and the explicit relationships posited with various test items and approaches to evaluation, make their work especially useful. Figure 8 presents Bloom's taxonomy in more detail. Learning contracts and degree programs can be formulated with reference to the different kinds of knowledge specified; learning activities can be designed to foster specific intellectual skills; methods and criteria for evaluation can address both the knowledge acquired and the skills developed.

Figure 6

Stages of Development*

Stage	Impulse Control, Character Development	Interpersonal Style	Conscious Preoccupations	Cognitive Style
Presocial		Autistic	Self vs. non-self	
Symbiotic		Symbiotic		
Impulsive	Impulsive, fear of retaliation	Receiving, dependent, exploitive	Bodily feelings, especially sexual and aggressive	Stereotypy, conceptual confusion
Self-protective	Fear of being caught, externalizing blame, opportunistic	Wary, manipulative, exploitive	Self-protection wishes, things, advantage, control	
Conformist	Conformity to external rules, shame, guilt for breaking rules	Belonging, helping, superficial niceness	Appearance, social acceptability, banal feelings, behavior	Conceptual simplicity, stereotypes, cliches
Conscientious	Self-evaluated standards, self-criticism, guilt for consequences	Intensive, responsible, mutual, concern for communications	Differentiated feelings motives for behavior, self respect, achievements, traits, expression	Conceptual complexity, idea of patterning
Autonomous	Add: Coping with conflicting inner needs, toleration	Add: Respect for autonomy	Vividly conveyed feelings integration of physiological and psychological, psychological causation of behavior, development, role conception, self-fulfillment, self in social context	Increased conceptual complexity, complex patterns, toleration for ambiguity, broad scope, objectivity
Integrated	Add: Reconciling inner conflicts, renunciation of unattainable	Add: Cherishing of individuality	Add: Identity	

Note. -- "Add" means in addition to the description applying to the previous level.

*From Loevinger, J., Wessler, and Redmore, C. Measuring ego development. San Francisco: Jossey-Bass, Inc. 1970.

Figure 7

Intellectual Development

Loevinger	Piaget	Bloom
Sterotypy, conceptual confusion	Symbolic, intuitive thought	
Conceptual, simplicity	Concrete Operations 1. Categorical classifications	Knowledge (simple recall)
Sterotypes and cliches	Concrete Operations 2. Reversible concrete thought	Comprehension
Conceptual complexity	Formal Operations 1. Relations involving the inverse of the reciprocal	Application Analysis
	Formal Operations 2. Relations involving triads	
Increased conceptual complexity, complex patterns	Formal Operations 3. Construction of all possible relations Systematic isolation of variables	Synthesis
Toleration for ambiguity; broad-scope objectivity	Deductive Hypothesis Testing	Evaluation

Figure 8

Condensed Version of the
Taxonomy of Educational Objectives

Cognitive Domain

KNOWLEDGE

1.00 KNOWLEDGE

Knowledge, as defined here, involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material. Although some alteration of the material may be required, this is a relatively minor part of the task. The knowledge objectives emphasize most the psychological processes of remembering. The process of relating is also involved in that a knowledge test situation requires the organization and reorganization of a problem such that it will furnish the appropriate signals and cues for the information and knowledge the individual possesses. To use an analogy, if one thinks of the mind as a file, the problem in a knowledge test situation is that of finding in the problem or task the appropriate signals, cues, and clues which will most effectively bring out whatever knowledge is filed or stored.

1.10 KNOWLEDGE OF SPECIFICS

The recall of specific and isolable bits of information. The emphasis is on symbols with concrete referents. This material, which is at a very low level of abstraction, may be thought of as the elements from which more complex and abstract forms of knowledge are built.

1.11 KNOWLEDGE OF TERMINOLOGY

Knowledge of the referents for specific symbols (verbal and non-verbal). This may include knowledge of the most generally accepted symbol referent, knowledge of the variety of symbols which may be used for a single referent, or knowledge of the referent most appropriate to a given use of a symbol.

* To define technical terms by giving their attributes, properties, or relations.

* Familiarity with a large number of words in their common range of meanings.

1.12 KNOWLEDGE OF SPECIFIC FACTS

Knowledge of dates, events, persons, places, etc. This may include very precise and specific information such as the specific date or exact magnitude of a phenomenon. It may also include approximate or relative information such as an approximate time period or the general order of magnitude of a phenomenon.

* The recall of major facts about particular cultures.

* The possession of a minimum knowledge about the organisms studied in the laboratory.

1.20 KNOWLEDGE OF WAYS AND MEANS OF DEALING WITH SPECIFICS

Knowledge of the ways of organizing, studying, judging, and criticizing. This includes the methods of inquiry, the chronological sequences, and the standards of judgment within a field as well as the patterns of organization through which the areas of the fields themselves are determined and internally organized. This knowledge is at an intermediate level of abstraction between specific knowledge on the one hand and knowledge of universals on

*Illustrative educational objectives selected from the literature.

Figure 8 (Continued)

the other. It does not so much demand the activity of the student in using the materials as it does a more passive awareness of their nature.

1.21 KNOWLEDGE OF CONVENTIONS

Knowledge of characteristic ways of treating and presenting ideas and phenomena. For purposes of communication and consistency, workers in a field employ usages, styles, practices, and forms which best suit their purposes and/or which appear to suit best the phenomena with which they deal. It should be recognized that although these forms and conventions are likely to be set up on arbitrary, accidental, or authoritative bases, they are retained because of the general agreement or concurrence of individuals concerned with the subject, phenomena, or problem.

* Familiarity with the forms and conventions of the major types of works, e.g., verse, plays, scientific papers, etc.

* To make pupils conscious of correct form and usage in speech and writing.

1.22 KNOWLEDGE OF TRENDS AND SEQUENCES

Knowledge of the processes, directions, and movements of phenomena with respect to time.

* Understanding of the continuity and development of American culture as exemplified in American life.

* Knowledge of the basic trends underlying the development of public assistance programs.

1.23 KNOWLEDGE OF CLASSIFICATIONS AND CATEGORIES

Knowledge of the classes, sets, divisions, and arrangements which are regarded as fundamental for a given subject field, purpose, argument, or problem.

* To recognize the area encompassed by various kinds of problems or materials.

* Becoming familiar with a range of types of literature.

1.24 KNOWLEDGE OF CRITERIA

Knowledge of the criteria by which facts, principles, opinions, and conduct are tested or judged.

* Familiarity with criteria for judgment appropriate to the type of work and the purpose for which it is read.

* Knowledge of criteria for the evaluation of recreational activities.

1.25 KNOWLEDGE OF METHODOLOGY

Knowledge of the methods of inquiry, techniques, and procedures employed in a particular subject field as well as those employed in investigating particular problems and phenomena. The emphasis here is on the individual's knowledge of the method rather than his ability to use the method.

* Knowledge of scientific methods for evaluating health concepts.

* The student shall know the methods of attack relevant to the kinds of problems of concern to the social sciences.

1.30 KNOWLEDGE OF THE UNIVERSALS AND ABSTRACTIONS IN A FIELD

Knowledge of the major schemes and patterns by which phenomena and ideas are organized. These are the large structures, theories, and generalizations which dominate a subject field or which are quite generally used in studying phenomena or solving problems. These are at the highest levels of abstraction and complexity.

Figure 8 (Continued)

1.31 KNOWLEDGE OF PRINCIPLES AND GENERALIZATIONS

Knowledge of particular abstractions which summarize observations of phenomena. These are the abstractions which are of value in explaining, describing, predicting, or in determining the most appropriate and relevant action or direction to be taken.

* Knowledge of the important principles by which our experience with biological phenomena is summarized.

* The recall of major generalizations about particular cultures.

1.32 KNOWLEDGE OF THEORIES AND STRUCTURES

Knowledge of the body of principles and generalizations together with their interrelations which present a clear, rounded, and systematic view of a complex phenomenon, problem, or field. These are the most abstract formulations, and they can be used to show the interrelation and organization of a great range of specifics.

* The recall of major theories about particular cultures.

* Knowledge of a relatively complete formulation of the theory of evolution.

INTELLECTUAL ABILITIES AND SKILLS

Abilities and skills refer to organized modes of operation and generalized techniques for dealing with materials and problems. The materials and problems may be of such a nature that little or no specialized and technical information is required. Such information as is required can be assumed to be part of the individual's general fund of knowledge. Other problems may require specialized and technical information at a rather high level such that specific knowledge and skill in dealing with the problem and the materials are required. The abilities and skills objectives emphasize the mental processes of organizing and reorganizing material to achieve a particular purpose. The materials may be given or remembered.

2.00 COMPREHENSION

This represents the lowest level of understanding. It refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.

2.10 TRANSLATION

Comprehension as evidenced by the care and accuracy with which the communication is paraphrased or rendered from one language or form of communication to another. Translation is judged on the basis of faithfulness and accuracy, that is, on the extent to which the material in the original communication is preserved although the form of the communication has been altered.

* The ability to understand non-literal statements (metaphor, symbolism, irony, exaggeration).

* Skill in translating mathematical verbal material into symbolic statements and vice versa.

2.20 INTERPRETATION

The explanation or summarization of a communication. Whereas translation involves an objective part-for-part rendering of a communication, interpretation involves a reordering, rearrangement, or a new view of the material.

* The ability to grasp the thought of the work as a whole at any desired level of generality.

* The ability to interpret various types of social data.

Figure 8 (Continued)

2.30 EXTRAPOLATION

The extension of trends or tendencies beyond the given data to determine implications, consequences, corollaries, effects, etc., which are in accordance with the conditions described in the original communication.

* The ability to deal with the conclusions of a work in terms of the immediate inference made from the explicit statements.

* Skill in predicting continuation of trends.

3.00 APPLICATION

The use of abstractions in particular and concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods. The abstractions may also be technical principles, ideas, and theories which must be remembered and applied.

* Application to the phenomena discussed in one paper of the scientific terms or concepts used in other papers.

* The ability to predict the probable effect of a change in a factor on a biological situation previously at equilibrium.

4.00 ANALYSIS

The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication, to indicate how the communication is organized, and the way in which it manages to convey its effects, as well as its basis and arrangement.

4.10 ANALYSIS OF ELEMENTS

Identification of the elements included in a communication.

* The ability to recognize unstated assumptions.

* Skill in distinguishing facts from hypotheses.

4.20 ANALYSES OF RELATIONSHIPS

The connections and interactions between elements and parts of a communication.

* Ability to check the consistency of hypotheses with given information and assumptions.

* Skill in comprehending the interrelationships among the ideas in a passage.

4.30 ANALYSIS OF ORGANIZATIONAL PRINCIPLES

The organization, systematic arrangement, and structure which hold the communication together. This includes the "explicit" as well as "implicit" structure. It includes the bases, necessary arrangement, and the mechanics which make the communication a unit.

* The ability to recognize form and pattern in literary or artistic works as a means of understanding their meaning.

Figure 8 (Continued)

* Ability to recognize the general techniques used in persuasive materials, such as advertising, propaganda, etc.

5.00 SYNTHESIS

The putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before.

5.10 PRODUCTION OF A UNIQUE COMMUNICATION

The development of a communication in which the writer or speaker attempts to convey ideas, feelings, and/or experiences to others.

* Skill in writing, using an excellent organization of ideas and statements.

* Ability to tell a personal experience effectively.

5.20 PRODUCTION OF A PLAN, OR PROPOSED SET OF OPERATIONS

The development of a plan of work or the proposal of a plan of operations. The plan should satisfy requirements of the task which may be given to the student or which he may develop for himself.

* Ability to propose ways of testing hypotheses.

* Ability to plan a unit of instruction for a particular teaching situation.

5.30 DERIVATION OF A SET OF ABSTRACT RELATIONS

The development of a set of abstract relations either to classify or explain particular data or phenomena, or the deduction of propositions and relations from a set of basic propositions or symbolic representations.

* Ability to formulate appropriate hypotheses based upon an analysis of factors involved, and to modify such hypotheses in the light of new factors and considerations.

* Ability to make mathematical discoveries and generalizations.

6.00 EVALUATION

Judgments about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria. Use of a standard of appraisal. The criteria may be those determined by the student or those which are given to him.

6.10 JUDGMENTS IN TERMS OF INTERNAL EVIDENCE

Evaluation of the accuracy of a communication from such evidence as logical accuracy, consistency, and other internal criteria.

* Judging by internal standards, the ability to assess general probability of accuracy in reporting facts from the care given to exactness of statement, documentation, proof, etc.

* The ability to indicate logical fallacies in arguments.

Figure 8 (Continued)

6.20 JUDGMENTS IN TERMS OF EXTERNAL CRITERIA

Evaluation of material with reference to selected or remembered criteria.

* The comparison of major theories, generalizations, and facts about particular cultures.

* Judging by external standards, the ability to compare a work with the highest known standards in its field--especially with other works of recognized excellence.

Moral and Ethical Development

Loevinger's schema posits relationships between cognitive style, or intellectual development, and "character development." The necessary relationship between intellectual and ethical development is recognized explicitly by both Kohlberg and Perry. Figure 9 juxtaposes stages of ego development and intellectual development with the stages of moral and ethical development set forth by Kohlberg and by Perry.

Figure 10 describes the Perry and Kohlberg formulations in more detail. The two systems do not precisely fit together because they are complementary rather than closely analogous. Kohlberg emphasizes shifting orientations toward authority, others, and self, such that self-chosen principles replace those given by authority or defined by peers, group identification, or the general culture. Perry describes increasingly complex intellectual processes by which moral issues are analyzed and understood, increasingly complex ways of defining and maintaining values and commitments while recognizing pluralism and accepting contrasting values and commitments of others. Although their emphases differ, both formulations integrate cognitive/intellectual development with moral/ethical development. They demonstrate the necessary interdependence of these two major dimensions of human development.

Interpersonal Style

Interpersonal style is closely linked to general levels of ego development, moral and ethical development, and intellectual development. Interpersonal competence, a term used by some theorists, is closely related to style but the terms have different implications: "style" implies a characteristic mode of relating to others; "competence" implies an array of skills pertinent to certain professional settings or more generally necessary for a satisfying existence. But the two are inseparable. Every relationship with another person has an aspect of competence. Acts toward another are intended, consciously or unconsciously, to have an effect of some kind. When interactions are casual, when we are merely "passing the time of day," the element of competence may be minimal, although even in such cases we are surprised if we produce no effect at all, not even a grunt. When important matters are at stake, the aspect of competence is larger. If we are seeking help or offering it, trying to evoke love or giving it, warding off aggression or expressing it, resisting influence by others or trying to exert it, the effectiveness of our behavior is a point of vital concern.

Personal styles acquired during childhood and adolescence may be singularly inappropriate for certain adult relationships at work, at home, and in the community. Therefore, a key problem in achieving competence is to gain greater control over those unconscious interpersonal reflexes so that living, loving, and work are more effectively accomplished for ourselves and others.

There are strong similarities among developmental theorists concerning the direction of change for interpersonal relationships.[2] White describes

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[2] See, for example, the work of Freud, Adler, Jung, Sullivan, Horney, Allport, Maslow, Murphy, Rogers.

Figure 9

Stages of Ego Development Associated with

Moral and Ethical Development*

Author						
			Ego Development			
Loevinger (1970)	Presocial	Impulse-ridden, fearful	Self-protective	Conformist	Conscientious	Autonomous, integrated
			Moral and Ethical Development			
Kohlberg (1968)	Egocentric	Obedience- and punishment-oriented	Instrumental egoism and exchange	Good-boy approval-oriented	Authority-, rule-, and social-order oriented	Social contract legalistic orientation Moral principle orientation
Perry (1970)		Basic duality	Multiplicity prelegitimate	Multiplicity subordinate, multiplicity correlate, or relativism subordinate	Relativism correlate, competing, or diffuse	Commitment foreseen Initial commitment, implications of commitments, developing commitments

*Adapted from Kohlberg, 1973, p. 46

Figure 10

Stages of Moral and Ethical Development

Kohlberg	Perry
Preconventional Level: Cultural rules of good and bad, right or wrong interpreted in terms of hedonistic-consequences and power of authority.	
Stage 0 Egocentric Judgment Judgments made on basis of what I like and want. No conception of rules or obligation independent of my wishes.	
Stage 1 Punishment and Obedience Physical consequences determine goodness or badness of action, regardless of human meaning or value of the consequences. Avoiding punishment and unquestioned deference to power values in their own right.	**Position 1 Basic Duality** World seen in polar terms of we-right-good to they-wrong-bad.
Stage 2 Instrumental Relativist Human relations viewed in marketplace terms. Reciprocity, fairness and sharing present but only with clear trades for self-satisfaction. "You scratch my back, I'll scratch yours."	**Position 2 Multiplicity Prelegitimate** Diverse opinions perceived but others are confused or wrong.
Conventional Level: Maintaining family, group and national expectations as value in its own right regardless of consequences. Conformity, loyalty and active support of the social order dominate.	**Position 3 Multiplicity Subordinate** Diversity and uncertainty accepted as legitimate but temporary in areas where authority just hasn't found the answers yet.
Stage 3 Good-boy, Nice-girl Good behavior is what pleases others, and is approved by them. Behavior frequently judged by intention. "Meaning well" becomes important for the first time.	**Position 4 Multiplicity Correlate or Relativism Subordinate** Legitimate uncertainty seen as extensive. Pluralism, with "everyone has a right to his own opinion," and relativistic reasoning dominate, or in relation to authority, become "what they want."
Stage 4 Law and Order Right behavior is doing one's duty, respecting authority, maintaining the social order for its own sake.	**Position 5 Relativism Correlate, Competing, or Diffuse** All knowledge is relativistic and contextual.
Postconventional, Autonomous, Principled Level: Individual tries to define moral values and principles which are valid and applicable apart from the authority of the individual or group holding them and apart from the individual's own identification with those groups or persons.	**Position 6 Commitment Foreseen** Need for orientation in a relativistic world through personal commitment perceived.
Stage 5 Social Contract Legalistic Right action defined by general standards which have been critically examined and agreed to. Clear awareness of the relativism of personal value and corresponding emphasis on procedures for reaching concensus.	**Position 7 Initial Commitment** First Commitment or affirmations are made.
Stage 6 Universal Ethical Principle Right defined by conscience in accord with self-chosen ethical principal that appeals to logical comprehensiveness, universality, and consistency: justice, reciprocity and equality of human rights, respect for human dignity.	**Position 8 Orientation in Implications of Commitments** Implications of commitment are experienced. Subjective and stylistic issues explored. **Position 9 Developing Commitments** Identity affirmed among multiple responsibilities. Commitment perceived as ongoing, unfolding activity through which life style is expressed.

it this way:

> Under reasonably favorable circumstances during young adulthood the natural growth of personality moves in the direction of human relationships that are increasingly responsive to the other person's real nature. During young adulthood there usually proves to be still a good deal to learn before one truly interacts with others in their own right as individuals. As a person moves in this direction he develops a greater range and flexibility of responses. He notices more things in the people with whom he interacts and becomes more ready to make allowance for their characteristics in his own behavior. Human relations become less anxious, less defensive, less burdened by inappropriate past reactions. They become more friendly, warm, and respectful. There may even be greater room for assertiveness and criticism. In short, the person moves in the direction of increased capacity to live in real relationships with the people immediately around him.
>
> (White, 1966, pp. 385, 386)

Figure 11 sets Loevinger's stages of interpersonal style against two models of professional behavior posited by Argyris and Schon, and Figures 12 and 13 describe the models in more detail. The second and third columns of those Figures Action and Consequences for the behavioral world, describe the interpersonal orientations and behaviors that characterize the two models.[3]

Model I interpersonal relationships are goal-oriented, aiming to maximize winning and minimize losing with strong emphasis on rationality and minimal open expression of negative feelings. They tend to be characterized by persuasiveness, blaming, sterotyping, intellectualizing, suppressing feelings, withholding information, private exchanges, competitiveness, diplomacy, manipulativeness, defensiveness, outward conformity with limited internal commitment. In Model 2 the emphasis is on creating valid information so internal commitment to free and informed choices can occur, and so actions can be openly and continuously monitored. Interpersonal relationships call for initiative, collaboration, direct and nonattributive observations, attention to one's own biases and inconsistencies, minimal defensiveness, trust and respect for individuality, and open confrontation on difficult issues.

Note that Model I conforms well to the interpersonal styles of Loevinger's Stages 2 and 3: "Stage 2, Receiving, dependent, exploitive, wary, manipulative; Stage 3, Belonging, helping, superficial niceness." Model 2 conforms to interpersonal styles associated with Stages 4, 5, and

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[3]These formulations are consistent with, and carry forward, the general work of other major theorists who have addressed professional competence and organizational behavior such as Fritz Rothlisberger, Douglas MacGregor, Renis Likert, and Warren Bennis.

Figure 11

Interpersonal style

(Loevinger)	(Argyris & Schon)
Autistic Symbiotic	Model I
Receiving, dependent exploitive	Defensive, inconsistent competitive, controlling
	Fearful of being vulnerable, withholding feelings, overly concerned about self and others, or unconcerned about others.
Wary, manipulative, exploitive	Defensive interpersonal and group relationships
	Defensive norms
Belonging, helping, superficial niceness	Low freedom of choice, internal commitment, and risk-taking.
	Model 2
Intensive, responsible, mutual concern for communications	Minimally defensive interpersonal relations and group dynamics. Learning-oriented norms.
Respect for autonomy Cherishing of individuality	

Figure 12

Model I Theory-in-Use

Governing variables	*Action strategies*	*Consequences for the behavioral world*	*Consequences for learning*	*Effectiveness*
1. Define goals and try to achieve them.	1. *Design and manage the environment* unilaterally (be persuasive, appeal to larger goals).	1. Actor seen as defensive, inconsistent, incongruent, competitive, controlling, fearful of being vulnerable, manipulative, withholding of feelings, overly concerned about self and others or underconcerned about others.	1. Self-sealing	Decreased effectiveness
2. Maximize winning and minimize losing.	2. *Own and control the task* (claim ownership of the task, be guardian of definition and execution of task).	2. Defensive interpersonal and group relationship (dependence upon actor, little additivity, little helping others).	2. Single-loop learning.	
3. Minimize generating or expressing negative feelings.	3. *Unilaterally protect yourself* (speak with inferred categories accompanied by little or no directly observable behavior, be blind to impact on others and to the incongruity between rhetoric and behavior, reduce incongruity by defensive actions such as blaming, stereotyping, suppressing feelings, intellectualizing).	3. Defensive norms (mistrust, lack of risk-taking, conformity, external commitment, emphasis on diplomacy, power-centered competition, and rivalry).	3. Little testing of theories publicly. Much testing of theories privately.	
4. Be rational.	4. *Unilaterally protect others from being hurt* (withhold information, create rules to censor information and behavior, hold private meetings).	4. Low freedom of choice, internal commitment, and risk-taking.		

From Argyris and Schon, pp. 68,69

Figure 13

Model II Theory-in-Use

Governing variables	*Action strategies*	*Consequences for the behavioral world*	*Consequences for learning*	*Consequences for quality of life*	*Effectiveness*
1. Valid information.	1. *Design situations or environments where participants can be origins and can experience high personal causation* (psychological success, confirmation, essentiality).	1. *Actor experienced as minimally defensive* (facilitator, collaborator, choice creator).	1. Disconfirmable processes.	1. *Quality of life will be more positive than negative* (high authenticity and high freedom of choice).	
2. Free and informed choice.	2. *Task is controlled jointly.*	2. *Minimally defensive interpersonal relations and group dynamics.*	2. Double-loop learning.	2. *Effectiveness of problem solving and decision making will be great, especially for difficult problems.*	Increased long-run effectiveness
3. Internal commitment to the choice and constant monitoring of its implementation.	3. *Protection of self is a joint enterprise and oriented toward growth* (speak in directly observable categories, seek to reduce blindness about own inconsistency and incongruity). 4. *Bilateral protection of others.*	3. *Learning-oriented norms* (trust, individuality, open confrontation on difficult issues).	3. Public testing of theories.		

From Argyris and Schon, pg. 89

6: "Stage 4, Intensive, responsible, mutual concern for communications; Stage 5, Respect for autonomy; Stage 6, Cherishing of individuality."

Argyris himself (see Figure 14) has posited an immaturity-maturity continuum, which contains elements highly consistent with Loevinger's elements of ego development. This close correspondence between Loevinger's developmental stages and the models posited by Argyris and Schon is frightening because most of our schools and colleges, businesses, legislatures, social agencies, and community organizations operate in Model I fashion. Argyris argues that in doing so they keep individuals from maturing, as employees are given minimal control over their environment and encouraged to be passive, dependent, and subordinate. Thus keeping people immature is built into the fundamental management practice of most organizations.

Development of Social Interest

"Social-interest" is Alfred Adler's term for a dimension of change that occurs as an individual outgrows egotism and the urge toward personal achievement and superiority. He used such phrases as "sense of human solidarity" and "fellowship in the human community" (1927, p. 23). It is similar to Allport's concept of self-extension where the welfare of another person, a group enterprise, or some other valued object or task becomes as important as one's own welfare:

> Maturity advances in proportion as lives are decentered from the clamorous immediacy of the body and ego-centeredness. Self-love is a prominant and inescapable factor in every life, but it need not dominate. Everyone has self-love, but only self-extension is the earmark of maturity.
>
> (1961, pp. 283, 285)

Erik Erikson's "generativity" is close to these notions. In Childhood and Society he writes

> The fashionable insistence on dramatizing the dependence of children on adults often blinds us to the dependence of the older generation on the younger one. Mature man needs to be needed, and maturity needs guidance as well as encouragement from what has been produced and must be taken care of. Generativity, then, is primarily the concern in establishing and guiding the next generation, although there are individuals who, through misfortune or because of special and genuine gifts in other directions do not apply this to their own offspring. And indeed, the concept of generativity is meant to include such more popular synonyms as productivity and creativity, which, however, cannot replace it.
>
> (1963, pp. 266-267)

More recently, Robert White, based on his twenty-five-year study of Harvard graduates, has added "expansion of caring" to the growth trends he identified earlier. In describing this dimension, which emerged with in-

Figure 14

Argyris

Immaturity-Maturity Continuum

mmaturity	Maturity
assive	Active
ependence	Independence
ehave in a few ways	Capable of behaving in many ways
rratic shallow interests	Deeper and stronger interests
hort-time perspective	Long-time perspective (past and future)
ubordinate position	Equal or superordinate position
ack of awareness of self	Awareness and control over self

In Hersey, P., and Blanchard, K. Management of Organizational Behavior, Prentice Hall, Inc., 1972, p. 51

creasing age, he stated that

> The point will be missed if "caring" is understood in a superficial sense. Our use of it here does not imply merely that one participates actively in the affairs of family, neighborhood, or larger community. Such activity can be motivated by escape from loneliness and boredom or by sheer pleasure in company and conversation; it does not necessarily signify real affective involvement in the welfare of others. The requirements of caring are also not met by having children or by being in an occupation like teaching or nursing, where the welfare of others is the stated professional goal. Children can be produced but their interests neglected, as we saw when studying parental rejections; jobs can be taken simply because they provide security and a comfortable income. Caring is not necessarily involved when a person expresses passionate interest in bettering the condition of the disadvantaged and downtrodden. This attitude may be used only to conduct an argumentative rebellion against the near-at-hand established order, to rap the knuckles of the bourgeoisie, or to secure advancement to a position of political power; the verbal champion may have little urge to do anything real for the cause he claims to have at heart. Caring refers only to the things one really has at heart. It cannot be safely inferred from externals. The true hallmark is in the sphere of feeling: how much the person suffers when the object of his caring suffers, how much he rejoices when the object rejoices, how naturally and spontaneously he does the things that are required to promote the object's well-being.
>
> (1966, pp. 400-402)

Figure 15 suggests a rough developmental sequence for this area. This sequence describes a progression where social interest gradually extends from primary concern with parents and close friends, key groups, and significant adults during childhood and adolescence, to spouse and children; then to work settings and avocational interest groups during early maturity. These priorities become enlarged and solidified by firm commitments to a limited array of deep and reciprocal intimate friendships. They are amplified by identification with particular community, religious, societal, or global issues that become the object of emotional investment, dollars, time, and energy that can be spared from other ongoing responsibilities. Studs Terkel's Working (1974) vividly portrays aspirations widely shared by persons throughout the working world which are consistent with this direction of development; working also drives home the hard realities that make it impossible for many to move beyond simple survival and devotion to family and work. The life-cycle data reported later in this section also are consistent with this general developmental sequence.

Despite its social significance, the development of social interest has not received the detailed attention that has been given to ego development,

Figure 15

Development of Social Interest

Childhood focus on parents and playmates

Pre-adolescent and adolescent focus on peers, reference groups, and significant adults

Primary concern with spouse and children

Identification with institutions, organizations, work settings, avocational interest groups

Commitments to deep and reciprocal intimate relationships

Investment in community, religious, societal, or global concerns

Change is additive. Later stages transform and incorporate earlier investments.

intellectual development, moral and ethical development, and interpersonal style, or competence. No stage theories or developmental levels have been postulated or studied. But the consistent recognition of this dimension of change by numerous students of adult development suggests that we should recognize it in our own thinking about individual differences and adult development.

Development of Purpose

Miller, Galanter, and Pribram (1960) elaborate how plans and purposes guide behavior. They point out that knowledge, action, and evaluation are essentially connected: knowledge guides action, and action is rooted in evaluation, for without comparative values deliberate action is pointless. Basically, a plan supplies "the pattern for that essential connection of knowledge, evaluation and action" (p. 61).

Interests can play a role similar to purposes. John Dewey called attention to the significant role of interests in education, especially as they achieve the force of purpose.

> Interest is not some one thing; it is a name for the fact that a course of action, an occupation, or pursuit absorbs the powers of an individual in a thoroughgoing way. But an activity cannot go on in a void. It requires material, subject-matter, conditions upon which to operate. . . . It requires certain tendencies, habits, powers on the part of the self. Wherever there is genuine interest, there is an identification of these two things. The person acting finds his own well-being bound up with the development of an object to its own issue.
>
> (White, 1966, pp. 390)

Robert White describes a growth trend he calls "deepening of interests":

> In speaking of a trend toward the deepening of interests we have in mind the progressive mastery of the knowledge and skill that is relevant to a sphere of interest. Interests often enough grow broader as well as deeper, but our concern here is with one particular quality rather than with quantity or extensiveness. We are also not referring to the amount of time a person devotes to his interests; a trend toward deepening does not imply that he spends more and more of his hours in a state of absorption until at last everything else is excluded. The trend we have in mind is away from a state in which interests are casual, quickly dropped, pursued only from motives that do not become identified with advancement of the object. It is toward a state in which the sense of reward comes from doing something for its own sake.
>
> (1966, pp. 391, 393)

Questions of purpose, pushed hard enough, raise basic existential

questions concerning the meaning of life, love, work. Those questions are faced keenly by adolescents and young adults. The life cycle research reported below, and the experiences of those who have been in close teaching relationships with adults, suggests that the questions arise again in more complex ways during the 30s, 40s, and 60s.

William Perry in his annual report on Harvard students put it this way:

> In the thousands of hours we listen to these students each year we are constantly made aware of the background against which students of this generation see and experience their lives: degrading war, immoral government, unstable economy, bankrupt national ideals. More immediately they sense the defeat of youth's rebellion and the pervasive uncertainty of future employment. . . . They sense the urgency to work, to do well, to compete, and they are afflicted by their failure to find meaning in it. . . .
>
> I should note that most of the students who come to us presume the failure to be in themselves; those who blame Harvard refer particularly to the quality of teaching. What is evident to us in all of them is the defeat of their yearning for a sense of purpose.
>
> (1974, pp. 2, 3)

A recent report on aging and the nature of work based on a long-term project underway at Yale brings home forcefully current social forces that complicate the problem of purposes:

> The process of making a career choice is the first significant confrontation with the sense of aging, involving as it does the knowledge or belief that such a decision is fateful because it determines how the rest of one's life will be "filled in." It is a "moment of truth" kind of problem which makes for varying degrees of vacillation, postponement, and anxiety because the choice involves numerous factors: strength of interests, familial relationships and pressures, economic factors (personal and national), love and peer relationships, time perspective, and how one reads and structures the future. The need for independence and autonomy comes face-to-face with societal pressure to conform, not the least of which is that one feels one has to make a decision at a particular point in time. One can no longer sample from the smorgasbord of opportunity; one must choose and live with the choice. There are, of course, individuals, probably small in number, who long have known what they were going to do; they are viewed by some with envy, by others with derision, and by still others with an effete attitude that seems to be saying "anyone who willingly and joyously enters this real world with the expectation of happiness has postponed his moment of truth." However one conceptualizes

the process of career choice, one cannot ignore that at this particular time in our society the process is for many suffused with dysphoric anticipations about whay may be symbolically called dying. It is not only a matter of "am I making the right or wrong choice" but, for many, "will society allow me to be the kind of person I want to be, regardless of choice?" The locus of control is perceived as external rather than internal. This has probably been the case for past decades, but it was accompanied by the belief that by striving, diligence, and maneuvering one could lick the odds. This accompaniment is much less in evidence today. . . .

Both within and among fields the choices are many. Students are aware of this as they are of the stubborn fact that they must make a choice. They are also aware that at the same time that society tells them there are numerous directions available to them, the educational system (beginning in high school) is organized increasingly to pressure the student to narrow his choices. . . .

There has been an increase in the number of people who seek a career change, be that change within or between fields of work. . . . The dynamics powering such changes are complicated and varied. The sought-for change can take place at any time after one has begun a career. Indeed, it is our impression that whereas it used to be a "mid career crisis," it now can occur much earlier. Several factors have contributed to both the increased frequency and earlier timing of career changes. One of these factors is the emphasis placed on the social worth of one's work. It has always been the case that professionals were expected to experience their work as personally satisfying, its social worthiness being taken for granted. It is percisely the social worth of much professional work that has been called into question in recent years. . . . When individuals no longer believe in the inevitability of progress, when they see themselves and their work as perhaps contributing to the moral confusion, it is small wonder that some will seek to make radical changes in their work and life style. Another factor, no less important than the first, is that recent generations have expected more from their work, that is, that their work will and should always be challenging and novelty producing. That is to say, work should be intrinsically stimulating and productive of "self-actualization" or "personal growth". . . . Ours is a time of conflicting and even contradictory tendencies: a new form of rugged individualism and a heightened sense of social responsibility. It was inevitable that these tendencies would have repercussions in the world of work in the form of an increase in career changes. . . . What is involved here is not only a changing set of attitudes toward work but to the experience of the passage of time in which dying and "imprisonment" are symbolically or literally somewhere in the background. To see one's self as remaining "unfilled" or "bored" or "locked in" in

what is perceived as a world of endless possibilities in a finite, shortening life raises the conflict between activity and passivity to a very heightened level, higher, we think, than it has ever been before in our society. . . .

Although their sources and dynamics have roots in the distant past and there have been and probably will be a waxing and waning in their surface manifestations, there has been a significant alteration in people's attitudes and values in regard to self, work, and social living. To some this alteration is prologue to social decay; to others it is prodromal to a better world in the making; to still others it is only confusion compounded of mystery and meaninglessness leading nowhere in particular. Without question, it is the younger generations who tend to pessimism, cynicism, and even nihilism. Their view of themselves in the future bears some startling similarities to what one frequently finds among the aged. Whereas many of the aged (or not so aged) look back and ask: "Was it worth it?" many younger people look forward and ask: "Will it be worth it?". . . .

If we are correct in our assessment, the concept of lifelong education must deal directly with two questions: How do we prepare children of all ages for thinking about and planning for more than one career? How do we begin to make it more possible for people to change careers without indulging dilettantism and requiring a self-defeating degree of sacrifice? The second question is the more thorny of the two because it so obviously brings to the fore the economic structure of marriage, business, industry, professional work, and education itself. . . .

Ours is a society that prides itself on the ever-expanding opportunities that education provides to more and more segments of the population. These opportunities create and reinforce rising expectations about what to expect over the life span, not only in a material sense but also in terms of level of personal satisfaction. . . .

(Sarason, Sarason, and Cowden, 1975, pp. 586-591)

Although the focus above is on the role of decisions concerning work, certainly a core problem, development of purpose includes other significant areas. Plans and priorities must be established that integrate decisions concerning marriage and family, avocational and recreational interests, close friends and community concerns, and shifting life styles and energy levels. Few people succeed in "getting it all together." Even if more fundamental existential questions are resolved, the problem of purposes is a life-long balancing act that needs recurrent attention. The life-cycle research reported below suggests how the focus shifts at various ages.

THE LIFE CYCLE

The conceptual frameworks concerning adult development briefly signaled above--ego development, moral and ethical development, intellectual development, interpersonal style, social interest, and purposes--describe major areas in which individual differences occur. Research on the life cycle suggests that these areas, in turn, vary in saliency and meaning with changes in age. This seems to be especially the case for purposes and social interest.

Figure 16 reports the work of several persons who have examined relationships between age and general orientations, problems, developmental tasks, personal concerns, and other adult characteristics.

Bernice Neugarten's work (1963, 1969) built on Erik Erikson's seminal formulations (1950, 1959) concerning the life cycle. Neugarten, more than any other theorist, elaborates the role of age and timing in adult development. The shift from "time since birth" to "time left to live" sets boundaries for other major changes: from sense of self-determination to sense of inevitability of the life cycle, from mastery of the outer world, through reexamination, to withdrawal and preoccupation with inner self and sponsoring others; from achievement to self-satisfaction. She found that when normal events were "on time"--children leaving home, menopause, death of a spouse, even one's own death--they were not experienced as crises. Departure and death of loved ones causes grief and sadness as does the prospect of one's own leaving, but when it occurs at times and in ways consistent with the normal, expected life cycle, most persons manage the event or the prospect without major upset.

Levinson, Gould, and Sheehy describe a general pattern that begins with the transition from adolescence to adulthood during the late teens and early twenties. During the mid-twenties--a period of "provisional adulthood"--first commitments to work, to marriage and family, and to other adult responsibilities are lived out. Then another transitional period occurs during the late 20s and early 30s where these initial commitments are reexamined and their meaning questioned. The long range implications of continuing with the current work, spouse, community, life style, have become apparent; and one or more of these many look less challenging or satisfying than at 22. In some cases changes must be made. In others reaffirmation and renewed commitment occur on a more solid basis, sometimes after trial flirtations with one or more alternatives.

The thirties are a time for settling down, for achievement, for becoming one's own person. But as the forties approach, time becomes more finite.

Responsibility for parents begins to be assumed while responsibilities for adolescent or college-age children continue. The likely limits of success and achievement become more apparent and the "mid-life transition" is at hand. Major questions concerning priorities and values are examined. Unless a change in work is made now, the die is cast. Affirmation of the earlier career most frequently occurs, but with moderated expectations and drive. A long-standing marriage may be temporarily or permanently upset. Friends, relatives, and spouse become increasingly important as "restabilization" occurs during the late 40s and 50s. Interests foregone in the service of work receive more attention. Mellowing and increasing investment in personal relationships characterize the 50s.

These abstractions and brief summaries do little justice to the work of these life-cycle theorists. But their work makes it clear that as we consider major areas of individual difference recognized by students of adult development we need to take age into account as another significant element.

Figure 16

The Life Cycle

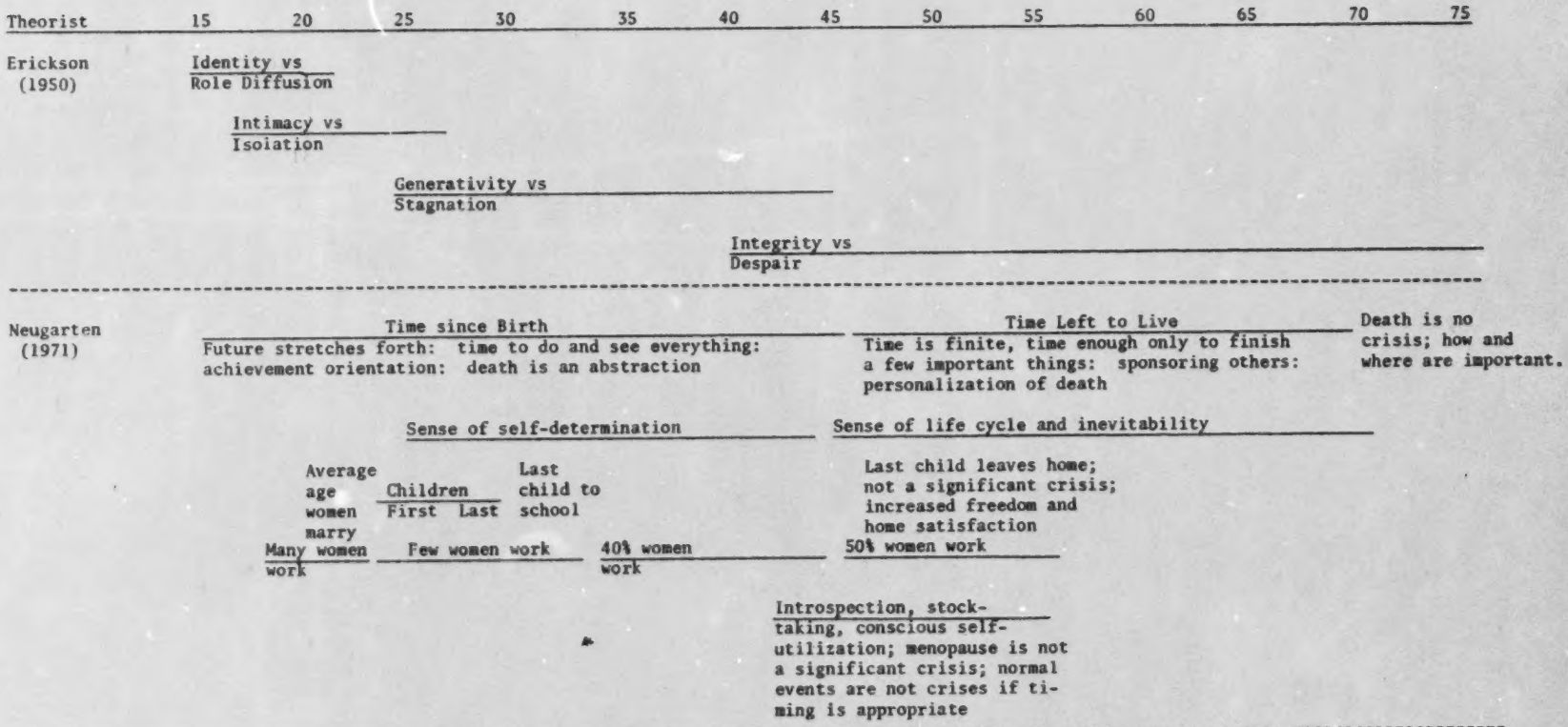

Figure 16 (Continued)

Theorist	15	20	25	30	35	40	45	50	55	60	65	70	75
Neugarten (1963)	Mastery of Outer world						Re-examination		Preoccupation with inner self / Withdrawal				
	Development of social personality; vocation and marital adjustment; home making, child rearing. Increased expressivity & expansiveness, reduced anxiety, increased autonomy, competence, stability			Further stabilization of social personality in family work, recreational patterns. High self-confidence, sense of achievement & mastery. Following outside cues. Energy congruent with opportunities			inner drives re-examined; achievement demands questioned. Resistence to coercion	Outer world seen as complex, dangerous conflictual. Increasing conformity, passivity			Life review, final restructuring preparatory to death		
											Increasingly meek and mild		
Levinson (1974)	leaving the family				settling down			Restabilization					
		getting into the adult world				becoming one's own person							
				transitional period									
		mentor plays significant role											
						mid-life transition							
Gould, R.L. (1972)	leaving parents breaking out	leaving parents staying out	becoming adult marriage work	question life's meaning	continued questioning of values; time is finite. Responsible for parents as well as children		Occupational die is cast interest in friends, reliance on spouse		mellowing, spouse increasingly important review of contributions				
	reliance on peers												
Sheehy (1974)	pulling up roots	provisional adulthood		age 30 transition	rooting		mid-life transition		Restabilization and flowering				
					boom								

CONCLUSION

These then are some of the principal dimensions of adult development: ego development, intellectual development, moral and ethical development, interpersonal style, development of social interests, and development of purpose. Work in some of these areas is much more advanced than in others, and certainly the relationships suggested across areas and stages are still largely hypothetical. The research on developmental ages is in a similarly formative state. Major phases--pulling up roots, provisional adulthood, age 30 transition, rooting, mid-life transition, restabilization--are beginning to be identified. The impacts of critical life events--leaving home, falling in love, getting married, having a child, taking a job, getting fired, quitting, facing career limitations, death of a parent, changing a career, retirement--are becoming clearer.

The data concerning developmental ages and the life cycle help us think more soundly about both content and process. They clarify the larger motives behind the investments of time, money, and energy, behind the personal sacrifices made by many students. They show us some of the more fundamental purposes that power degree aspirations, pursuit of promotion or career change; desire to meet new persons, read more widely, explore new ideas and interests. They remind us that the existential questions of meaning, purpose, vocation, social responsibility, dependence, human relationships, which so many adolescents face with difficulty, are reconfronted by many 30-, 40-, and 60-year-olds.

Can such information help us better distinguish the person whose aim is simply professional training from the one whose professional concerns are more oriented toward clarifying the major expectations of a job and the career patterns associated with it? Can we more accurately differentiate between the 35-year-old who comes for clearly specified professional knowledge or competence needed for a promotion or a new opportunity, and the 45-year-old who wonders whether all those long hours, family sacrifices, short-changed human relationships, and atrophied interests were really worth it? And distinguish both of these from the 25-year-old eagerly exploring the potentials of a first career choice? Can we better recognize that the 30-year-old housewife pressured by her husband to become more sophisticated, develop broader interests, get out more, and define her own career, will be very different from the 25-year-old just settling into the challenges and satisfactions of new babies and a new home, and from the 50-year-old who is building a richer and easier existence with her husband?

The major areas and levels of development, and the relationships among

them, can be seen as a crude map that might define a course of development for post-secondary education, life-long learning, experiential learning and its assessment--that is, a conceptual framework that might guide ESC's development. This map probably contains fully as much error and misconception as those that guided Leif Ericson, Columbus, and Vasco de Gama. But with courage, ingenuity, and persistence, they found new worlds and created more accurate maps in the process. There is no reason why higher education and Empire State cannot make a similar contribution.

Work is already underway in several key areas. Lawrence Kohlberg and his associates have developed materials and teaching approaches that explicitly aim to help persons move from one level of moral development to the next, and these materials have been used in secondary schools, colleges, prison settings. Harold Lasker, also at Harvard, is tackling Loevinger's states of ego development and is trying various approaches to achieve change from one stage to the next with graduate students there. Chris Argyris and others are helping corporation presidents, educational administrators, and graduate students increase professional and interpersonal competence, pushing ahead both conceptually and practically. The Cooperative Assessment of Experiential Learning project, sponsored by Educational Testing Service, also has begun work in this area.

But higher education and Empire State College cannot leave all the work to professional specialists or to externally funded consortia. For the most important job is to examine our current practices. Students, faculty members, and administrators all can contribute to and profit from such examination. How do current students distribute themselves among the areas and levels? Which areas and levels of development are best served by the major educational alternatives we provide, and by the facilities, faculty characteristics, and employment expectations that support those alternatives.

Participation by faculty members in examining their own fields is critical, because they know most about the diverse possibilities available in textbooks and primary sources, in audio-visual materials, programmed learning, and other forms of mediated instruction. They know what kinds of field observations, work experiences, or volunteer activities may have most power. They know the areas of controversy, where the value issues reside, what kinds of career patterns may be possible. In short, the professionals who are directly involved can be the richest sources of creative suggestions for processes and programs that more adequately cover the ages, areas, and stages that characterize our students.

This research and theory also can be a conceptual framework that students themselves use for self-evaluation and educational planning. With appropriate supplementary materials each student can decide (a) whether to pursue one or another area directly, and (b) how to pursue more immediate educational or vocational purposes in ways that also enable stage changes in one or more valued areas of development. On the basis of such reflections each student can make more powerful, efficient, and economical use of educational alternatives available, can help create others not yet considered, and can take more effective charge of his or her learning and personal development.

Concrete contributions by individual students, faculty members, and administrators are of major importance. They will provide the wide array of concrete examples that are critically needed. More basic research and theory is necessary and will be undertaken by the professional specialists whose business it is. But the basic need now is to de-mystify the "affective domain," to demonstrate that colleges and universities can contribute to human development in ways that go beyond simple marketing of skills, information, and credentials.

PART THREE

POTENTIAL CONTRIBUTIONS FROM ACADEMIC DISCIPLINES

Academic disciplines, such as philosophy, literature, drama, history, and science, can contribute powerfully to several major dimensions of adult development, including moral and ethical development. We are most accustomed to thinking about the contribution of these academic disciplines to intellectual development, although we still could become more explicit about how the intellectual skills of application, analysis, synthesis, and evaluation can be fostered by various disciplinary and interdisciplinary studies. We are less accustomed to thinking about ways in which the disciplines can contribute to moral and ethical development, interpersonal competence and style, and the development of social interest and clarity of purpose. Professional and vocational studies often seem to be considered key areas for these outcomes, but the disciplines themselves can be equally effective. Focusing on moral and ethical development in the following five fields may suggest the possibilities for all fields -- possibilities that will require further thought and energy but that may be equally valid. By these examples there is no intention to ignore or minimize the importance of other dimensions of development or other areas of study.[1]

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[1]These examples draw heavily on Collier, G., Wilson, J., and Tomlinson, P., Values and Moral Development in Higher Education (1974).

PHILOSOPHY

Philosophy does not contribute to moral and ethical development by explicitly, surreptitiously, or unconsciously instilling a particular set of metaphysical assumptions, a faith, a creed, or a belief system through indoctrination and less obvious forms of persuasion. Nor does philosophy contribute most effectively by teaching about particular belief systems of philosophic orientations. Philosophy contributes through its root purpose, the search for truth through logical reasoning, and through its basic method of analyzing the grounds on which fundamental beliefs are held and by examining the concepts for expressing them. Socrates gave us a model, driving home the power of dialogue and dialectic.

The requirements for doing philosophy speak directly to moral and ethical development: take truth seriously; set aside yourself; penetrate your prejudices; distinguish "what is right" from "what I like"; use care with language; define your terms; abide by publicly stated rules; subject your views to public criticism. These requirements express general values, but they do not state particular beliefs or assert a metaphysical assumption. Therefore, doing philosophy is free of authoritarian and even authoritative dynamics. There are no answers like those created by mathematical systems or scientific research. Indeed, "answers" shrivel in significance compared with the importance of the doing. It is by helping each student learn the doing, developing the skills and habits required in relation to whatever "content" is significant for that person, that makes philosophy powerful.

Most teachers would probably agree that lecturing to students is less likely to stimulate such events than experiences involving dialogue: dialogue between teacher and individual student, among several students, between students and other adults. The location can be the classroom; but it can also be the departmental office, the coffee shop in the union, the professor's home after supper, the dormitory lounge, or any site where the student can discuss values, ideals, and beliefs with someone else and ponder the implications afterward. Among the most valuable events seem to be such conversations with the student's parents and with other older adults whom the student emulates.

When the requirements for doing philosophy are brought to bear on concrete issues and experiences encountered at work, in the home, or in the community, increased potential for moral and ethical development results. To what extent is a corporate or institutional decision made on its merits, and to what extent does it serve special individual interests? Are the political issues squarely faced, or are substantive issues really a smoke screen for under-

lying personal interests? Do parental standards concerning behavior really rest on judgments concerning the child's well being and development, or do they basically aim to meet the parents' needs for comfort, quiet, peace of mind. Are the arguments and data from younger family members recognized and evaluated for soundness and accuracy, or are they patronized and passed over? How much philosophical rigor characterizes the writing, debates, open discussions of community issues concerning zoning, busing, taxes? How much rigor characterizes the individual student's position on such issues? "Doing philosophy" in relation to such experiential contexts as these not only enriches understanding of the content and implications of various philosophic systems, but it also helps each student move ahead in the ways his or her particular beliefs and values are held.

LITERATURE

In literature there are, of course, characters. Characters display motives and emotions; they reveal values, attitudes, and belief systems with the reasoning processes, prides, and prejudices that lie behind them. Literature gives us these persons in context, providing insights concerning the pressures and sequences of experience that lead to change in characters and consequent outcomes.

What levels of moral and ethical development characterize the key persons in best sellers like What Makes Sammy Run, The Fountainhead, Ten North Frederick, and in classics like The Red and the Black and The Grapes of Wrath? What are the pressures that force these persons toward one level or another? What internal strengths, from what sources, provide leverage against those external forces?

In literature we find persons who have acted out our most private fantasies, who have pushed our most cherished assumptions to the utmost, who exemplify in extremis our most fundamental predispositions. By examining those characters and by putting ourselves and our experiences against them, insights come. Moral and ethical development is thus nourished.

There is the plot, the issue, the flaw that provides the dramatic fulcrum. O'Neill's and Pinter's characters struggle with dominance and submission, mastery and being mastered. Shakespeare uses mistaken identity to contrast continually concepts of role and of self. Conflicts between self-interest and commitment run rampant. Dostoyevsky, Kafka, Malroux portray the inexorable connection between morality and identity with protagonists whose values are so challenged that sense of self and equilibrium are upset. Moral ambivalence is a dominant theme in contemporary literature. An entire culture understands Catch 22.

Most significantly, perhaps, literature takes us beyond vague generalities about goodness, truth, justice, integrity, and responsibility. Commitment to personal, social, and college values that assert concern for "responsible citizenship," "tolerance of others," and autonomy and interdependence is easy in the abstract; but literature, by being descriptively specific, shows what those values can really mean. It protects us against easy labeling and facile self-deception.

The typical emphasis on critical analysis of character, plot, imagery, and the like, need not be displaced. It can be enlarged and more powerfully driven when explicit links to moral issues are forged. An awareness of these factors,

accompanied by the individual's personal reflection, evaluation, and analysis, can lead to more informed and intentional behavior. Thus the study of literature can become the catalyst for increased self-awareness and an encounter that forms a kinetic link between literature, the student, and his/her moral and ethical development.

Although reading is a solitary experience that can be eventful in changing attitudes and knowledge, it is through discussion that most of us are stimulated to prove these issues. Group discussions, such as those exemplified by many classes and Great Books meeting groups, provide such opportunities when they move beyond the technical consideration of the writer's craft to a consideration of the issues raised by the characters, plots, and social contexts.

Beyond reading and discussion, writing itself stimulates further thought. Character sketches, metaphors, autobiographical vignettes, imaginative narrative--all can aim to capture different levels of moral and ethical development, thereby changing and enlarging one's perspective.

Putting literature against personal experiences and current contexts not only enriches the understanding of the literature, it also provides insights useful for personal development. Who are the Sammy Glicks and Willie Lomans where I work or live? What is their social context? What plot are they playing out? And what is the novel I have lived so far and continue to create? Which character and conditions match my own? What forces operated for them and with what result? What is the likely climax and denouement when my play has been staged?

DRAMA

Sophocles, Shakespeare, Shaw, Synge--drama has been the art form that most commonly confronts the citizenry with matters of moral concern. That's why there are pervasive and persistent problems of censorship in film, television, radio, and theater. Although the empirical evidence concerning effects on viewers is limited and mixed, except perhaps with regard to violence, our subjective experience is often profound. But the concern here is not with the experience of watching drama but with learning it through performance. Study of plays is similar to study of other literary forms and therefore has the same potentials as those mentioned for literature. But consider the contributions of creating a drama, of production and performance, of directing and acting.

Drama is representation. Actors assume roles. The director and the cast, individually and collectively, must first find their way into the historical condition, the situation, the issues, the persons, the dynamics of relationships among them. Then, drawing on their experiences, each person and the collective has to find a way back out that presents the "play." This process requires that participants make the author's work their own: the author's situation, dilemma, persons and reactions, values, opinions, actions, and consequences have to be owned. Those elements can be analyzed for understanding, but they cannot be judged. They must be responded to personally if powerful representation is to occur; they cannot be dismissed or distorted to conform to personal biases or beliefs. Paradoxically, therefore, drama requires both dissociation from self and use of self; it requires stepping outside oneself to be someone else while drawing on oneself to understand that being.

Note also that dynamic directors often see interpretation and rehearsal not as working <u>from</u> a text but <u>toward</u> it. Improvisations, rehearsal texts different from performance texts, demanding action and experiences in real life situations prior to on-stage representations are used to build toward a coherent, powerful, and entertaining representation.

Drama need not always proceed from an author's text. Both professional and amateur theater create "plays" by working directly from personal experiences, original documents, or both. Improvisations are sharpened; issues and dynamics are clarified. Public audiences are admitted as the creation evolves.

Of course, doing theater does not automatically lead to moral and ethical development. There is no empirical evidence that demonstrates consistent

differences between theater folks and others, and individual cases seem to span the full range. That would not be unexpected for professionals where dissociation from self must become built into daily existence. Students likewise can create those compartments and must do so to realize the "play." But the play creates an experiential context which supplies rich capital for post-play self-confrontation and self-examination. Activities that analyze the dissociation and exploit its capital have powerful potential for moral and ethical development.

HISTORY

History, perhaps more than any other academic discipline, speaks directly to the core problem of moral and ethical development as that development is conceptualized by Kohlberg and Perry. History is a record of persons who must make absolute decisions in the face of pluralistic values, with relativistic and contingent information. History confronts us with that essential human condition, with ways particular situations have been met, and with the consequences of the decisions and actions taken. If history is a record of human consciousness and human decisions, it is also a record of human morality in action.

History also records the remorselessness of sequence. It makes apparent the fact that each act is a moral statement, that each individual is both constrained and freed by the actions of others and by the sequence he or she creates through living. Consider the issues of the past and those before us: the Crusades, the Inquisition, the American, French, and Russian revolutions, the American Civil War, Nazi Germany, Hiroshima, Vietnam, the Arab-Israeli conflict, Watergate, busing, New York City, the United Nations. Consider the persons: Moses, Nero, the English kings and queens, Napoleon, Catherine the Great, Lincoln, Hitler, Churchill, Roosevelt, Truman, Kennedy, Johnson, Nixon. What levels of moral and ethical development were implicit-- or explicit-- in these events and times? At what level of ethical and intellectual development did these persons act?

The basic objectives for the study of history need not be supplanted by activities that speak to moral and ethical development. Historiography, historical methods, and historical understanding can be pursued in ways that foster moral development while achieving disciplinary aims. Experiences that contribute to this area of development can range from the analysis of primary documents and field trips to important sites to analyses of one's own background and actions, including interviews with parents, other relatives, friends, and acquaintances regarding major turning points in their lives and their own views of life and responsibility.

SCIENCE

Like philosophy, the practice and methods of science and the principles on which this practice rests have direct implications for moral and ethical development. Rules of evidence and methodological constraints exist to screen out subjectivity and to control for biases introduced by special interests or conditions. Issues are to be settled on the basis of evidence, not through coercion, personal argument, or appeal to authority. Yet, observers such as Taylor argue, scientists cannot fully control their biases and will delude themselves and others if they claim objectivity. These principles and problems take us a long way down the Perry/Kohlberg continua for moral and ethical development.

In addition, the content of science has moral and ethical implications: evolution, environment, limits to growth, genetics and geriatrics, biofeedback and behavior modification, fission and fusion. And there are the scientists: Darwin, Copernicus, Galileo, Nobel, Bacon, Oppenheimer, Watson, Skinner, Coleman. How have they coped with the ethical implications of their work? What are the sociocultural, familial, and personal roots of the values they hold? How are those values held? Innocence is no longer adequate preparation for the social role of scientist. For the first time scientists are foreclosing certain avenues of research because the ethical implications look unmanageable. Is that decision morally sound? On what grounds?

Basically then, the methods and content of science and the social role of scientists offer significant opportunities for moral and ethical development. Given the pressures to cover increasingly complex and comprehensive information, activities to address these objectives will probably be most readily introduced to "science for the non-scientist." But perhaps the need is more urgent for the budding professional. In a world where professional expertise has become institutionalized and where the fruits of science and technology become increasingly dominant, extension of professional training to include explicit attention to moral and ethical concerns may be critical.

Laboratory experience has long been accepted in science education, both in learning scientific methodology and in replicating critical past experiments. Actual participation in new experiments can be even more eventful, particularly if the participation involves discussion of methodological responsibility and the substantive implications of the findings. Vicarious participation, through reading such books as Watson's The Double Helix, can prove useful if similarly combined with discussion. And participation not as the experimenter but as the experimentee, as in being a subject in psychological or sociological experiments, can lead to the consideration of responsibility for other subjects,

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